



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

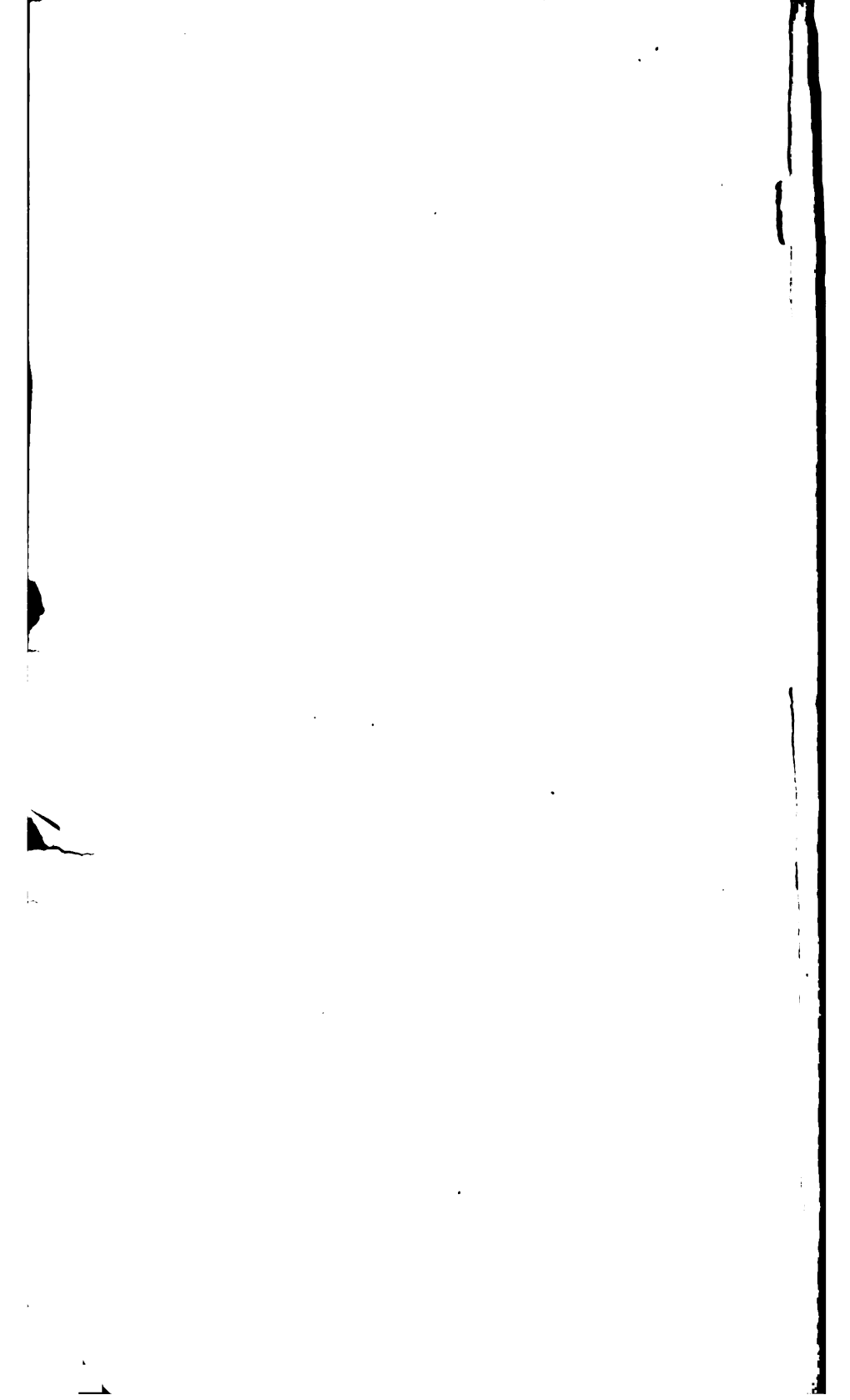


3433 06907622 6

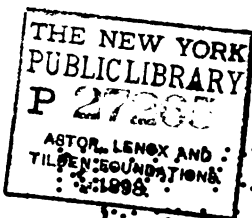
ANNEX

ANNEX

ANNEX



AN
ADDRESS,



DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

OCTOBER 7TH, 1824,

BEING

THE ANNIVERSARY FOR THE CHOICE OF OFFICERS,

[at]
AND THE SIXTH

TRIENNIAL CELEBRATION

OF THEIR

PUBLIC FESTIVAL.

BY ALPHEUS CARY.

..... "Industry! rough power!
Whom labour still attends, and sweat, and pain;
Yet the kind source of every gentle art,
And all the soft civility of life."

Thomson.

BOSTON :

MUNROE AND FRANCIS, 128 WASHINGTON-STREET,

Corner of Water-Street.

1824.

☆ MASS. HIST. SOC.

MASSACHUSETTS CHARITABLE MECHANIC ASSO-
CIATION.

In Faneuil-Hall, Oct. 7, 1834.

Resolved, that the Thanks of this Association be presented to Mr. ALPHEUS CARY, for his excellent Address this day delivered, and that he be requested to furnish a copy for the press.

Voted, that the President, Vice-President and Treasurer be a Committee to carry the above vote into effect.

TO MR. ALPHEUS CARY.

Sir,

In compliance with the foregoing vote, the undersigned with much pleasure present you the thanks of the Association, for your excellent Address, pronounced before them on the 7th instant, and solicit a copy thereof for the press. In discharging this duty, they cannot forbear to express the high gratification, which they individually experienced in listening to your Address, and the assurance with which they have the honour to be

Your friends and obdt. servants,

S. PERKINS,
J. JENKINS,
J. LOVERING,

} Committee.

Boston, October 8, 1834.

Boston, October 12, 1834.

Gentlemen,

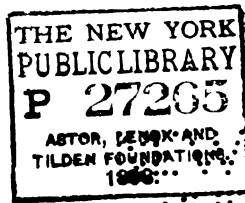
I have received your communication of the 9th instant, containing the thanks of our Association, and requesting a copy of the Address delivered by me, at our late triennial celebration, for the press. In complying with that request, I have only to add that the pleasure, I have received from the flattering testimonials of your approbation, would have been greatly enhanced, did I believe they were merited. The necessary avocations of a laborious profession, have afforded me little leisure for reading or reflection: relying however on the candour and liberality of my brethren, I cheerfully submit the address to their disposal: and with sentiments of perfect respect and esteem for them, and for yourselves individually,

subscribe myself, truly

your friend and humble servant,

ALPHEUS CARY.

S. Perkins, J. Jenkins, J. Lovering, Esqrs.



ADDRESS.

MY RESPECTED BRETHREN,

THE occasion, on which we are this day assembled, is one peculiarly interesting in its character. It is one, calculated to call into exercise the intellectual and the generous feelings of our nature.

Forgetting, awhile, the cares and the toils incident to our several occupations, we meet *here*, to mingle our sympathies ;—to offer up on the altar of friendship and benevolence, the holiest affections of the human heart.

And what would be the worth of human existence, without the exercise of those affections? The cold misanthrope, whose heart never vibrated to the touch of sympathy, and who views with stoical indifference every thing that passes around him, may be incapable of estimating the value of institutions of a philanthropic character.

Not so is it, I trust, with the intelligent and respectable auditory which now listens to me. I would fain believe there is no one in this numerous assembly, who does not rejoice that he lives in an age when the spirit of improvement has gone forth ; when associations are formed and cherished, for promoting the happiness of our race, by aiding the progress of all those arts which support and adorn civilized society.

In an especial manner have *we*, my brethren, reason to rejoice, that we live in a country whose free institutions and enlightened system of policy give us such preeminent advantages over those of our class in the despotic nations of Europe. And let us not

be unmindful of our obligations to that *Beneficent Being*, who has endowed us with capacities, physical, intellectual and moral, to enjoy our inestimable privileges.

As your humble organ on this auspicious occasion, permit me to solicit your attention, while I address you on the nature and objects of our association. Although, as its name imports, it is a charitable institution, yet there are other objects of high importance, connected with its interests, to which I deem it my duty, at the present time, to allude. One of those objects is, to stimulate genius, and bring into exercise mechanical skill; thus producing an honourable competition among the members of the various mechanical professions.

On former occasions, premiums have been awarded for new and useful inventions, and for superior specimens of workmanship; and although the government of our association, in their wisdom, have thought proper to discontinue them for the present, yet I trust the time is not far distant, when we shall find sufficient inducements to renew them, with more encouraging prospects of success.

Although the powers of mind requisite to excel in mechanics may not be of that ethereal cast, peculiar to the poet and the belles-lettres scholar;—although the plodding philosopher, and ingenious mechanician, may not be able, by the brilliancy of his fancy, the poignancy of his wit, or the enchanting music of his periods, to excite that enthusiastic admiration, which often accompanies mere literary merit, yet the results of his labours are not the less important, nor the less beneficial to mankind.

Genius, when devoted to useful purposes, should be honoured and encouraged, wherever it is found. This divine power, “without which judgment is cold and knowledge is inert; that energy, which collects, combines, amplifies and animates,” whether possessed by a poet, who, like SHAKSPEARE or MILTON, soars

aloft into the regions of fancy and imagination, or like NEWTON or LA-PLACE, penetrates into the profoundest depths of philosophical and mechanical science, is entitled to receive the homage of our highest respect.

It was this which inspired the immortal ARCHIMIDES,^A the father of mechanics, when he produced those great inventions so useful to mankind, and which cast such a lustre on his name, and on the country which gave him birth.

It was this, which inspired the great GALILEO,^B when, bursting asunder the shackles imposed by the superstition of the age, his original and powerful mind demonstrated the superiority of true science and sound philosophy, over the dreams and dogmas of visionary theorists and ecclesiastical bigots.

It was this, which enabled the illustrious FRANKLIN^C to draw from the clouds of Heaven the electric fire, and to make those other discoveries in philosophical and political science, which have placed him by the side of the first philosophers and politicians of his time.

It was this, which gave to ARKWRIGHT^D his fortune and his fame;—and enabled him to confer on his country one of the greatest benefits ever derived from human ingenuity.

It was this, which enabled WATT,^E and the no less celebrated FULTON,^F amid all those difficulties and discouragements which are usually attendant upon new experiments, to triumph over every obstacle, and to effect those astonishing improvements in the application of steam, which have proved of such incalculable advantage to the world.

Genius of the highest order, it is true, it is the lot of few to possess. Those superior minds which occasionally appear among us, to enlighten and improve the world, are rare; their visits are like those of angels, “few and far between:” but this

consideration should not discourage the aspiring mind; much may be done by education, industry and perseverance.

*"What cannot art and industry perform,
When science plans the progress of their toil !
They smile at penury, disease and storm ;
And oceans from their mighty mounds recoil."*

The inventive faculties of man, however, need a stimulus; a motive for exertion; and when this is presented, the happiest results may be anticipated. And so, also, is it with mechanical skill. Wherever a liberal patronage is extended to the arts, a much greater share of inventive, as well as practical talent is brought into operation.

What a boundless field does the science of mechanics present for the exercise of human genius ! What wonderful revolutions in the physical and moral world, have been produced by its agency !

There is not a particle of matter, but is subjected to its laws. For what else is there in the visible world but matter and motion ? To the science of mechanics are we indebted for the simplest utensils of husbandry ; all mechanical trades ; all the mighty engines of war ; all vehicles of navigation by sea, and of conveyance by land ;—all the vast and complicated machinery used in manufactures ;—even a knowledge of the human frame is dependent, in some measure, on the science of mechanics ;—the use of the muscles, bones, joints and sinews, proves the human frame to be little else than a mechanical engine :—Astronomy, by which we determine the motion of the heavenly bodies, their periods and revolutions, is founded on the science of mechanics. The Newtonian system of philosophy is based on the solid foundation of mechanics ; a foundation which can never be shaken. Chemical operations, —the laws of reflection and refraction, depend also on this science.

Time would fail me, were I to attempt an enumeration of all the benefits derived from a knowledge of this important science. That the operative mechanic, who labours daily in his vocation, should make himself master of the science of mechanics, in its most comprehensive sense, is not to be expected, nor is it indispensable.

In a country like our own, however, blessed with the happiest system of government which the world has yet witnessed;—in a country abounding in physical resources of every kind;—considering that, notwithstanding the rapid advances made in manufactures, we are still dependent on foreign nations for many of the conveniences and elegancies of life,—considering also the demand for scientific and well educated men, in the higher branches of the mechanic arts,—I cannot but think, that in paying more attention, than we have hitherto paid, to the scientific principles of mechanics, we shall consult the prosperity of our fraternity, and the substantial interests of our country.

In viewing this subject, as it regards ourselves, many powerful motives are presented to induce us to cultivate our mental powers. The well educated has a decided advantage over the unlearned mechanic; and if he does not avail himself of this advantage, the fault is his own: He is enabled, with more facility, to improve himself in his profession; he discovers new sources of wealth;—his knowledge, when properly directed, gives him influence, inasmuch as it inspires confidence in those who employ him; and it gives him respectability in society. In a moral point of view, the cultivation of the intellectual powers is of the highest importance.

The following remarks of a writer in a foreign journal* recently established, although intended for

* The London Mechanic's Magazine.

the meridian of London, are so pertinent to this part of my subject, that I venture to repeat them.

“The moral good, which results from the acquisition of knowledge, is chiefly this,—that by multiplying the mental resources, it has a tendency to exalt the character,—and, in some measure, to correct and subdue the taste for gross sensuality. It enables the possessor to beguile his leisure moments (and every man has such) in an innocent, at least, if not in a useful manner. The poor man who can read, and who possesses a taste for reading, can find entertainment at home; without being tempted to repair to the ale-house for that purpose.

“His mind can find employment when his body is at rest; he does not lie prostrate and afloat on the current of incidents, liable to be carried whithersoever the impulse of appetite may direct. In the mind of such a man there is an intellectual spring, urging him to the pursuit of *mental good*; and if the minds of his family are also a little cultivated, his conversation becomes the more interesting, and the sphere of his domestic enjoyment is enlarged; the pleasures which lie open to him at the gates of knowledge, put him in a disposition to relish more exquisitely, the tranquil delights inseparable from the indulgence of conjugal and parental affection: thus he becomes more respectable in the eyes of his family, than he who can teach them nothing: he will be naturally induced to cultivate whatever may preserve, and to shun whatever may impair that respect. Inured to reflection, he will thus carry his views beyond the present hour; he will extend his prospects a little into futurity, and be disposed to make some provision for his approaching wants, whence will result an increased motive to industry, together with a care to husband his earnings and to avoid unnecessary expense. The poor man, who has gained a taste for good books, will, in all likelihood, become

thoughtful; and when you have once given the poor man a habit of thinking, you have conferred on him a much greater favour than by the gift of a large sum of money: since you have put into him the principle of all legitimate prosperity;—for according to our great philosopher, Bacon, ‘Knowledge is power.’”

The foregoing remarks, although addressed to the mechanics of the British Metropolis, may with very little alteration, apply to those of any other city in the world. I would by no means wish to be understood as conveying the idea, that the unlettered man is necessarily immoral or sensual; the man of virtuous principle, however limited his knowledge or acquirements, is guarded against the enticements of vicious example; but the young and inexperienced, whose characters are not formed, whose principles are not fixed, need the aid of instruction and advice. It is our duty, therefore, as master-mechanics,—as members of a moral and intelligent community, to study the intellectual and moral, as well as the professional improvement of those who depend on us for instruction and employment. Any suggestions, therefore, with a view to further these objects, however humble the source from whence they proceed, will, I am sure, receive your candid and serious attention.

It is the part of wisdom, my brethren, to profit by the knowledge and experience of others;—and although I am well convinced that the mechanics of this metropolis are not surpassed in morality and general intelligence, by those of any other city in the world, yet I am persuaded that by studying the character of our class, and observing the progress of the arts in those countries, where they are farther advanced than in our own, much may be learnt which it will be useful for us to know.

The means of obtaining the rudiments of a common education, on account of the excellent system of

free schools established among us, are undoubtedly superior to those generally enjoyed by the European mechanic. But for obtaining a knowledge of scientific principles, the more advanced state of the arts, the greater number of scientific teachers, and the facility and cheapness with which scientific books and apparatus can be procured, must give to the European, advantages greater than we can, at present, be presumed to possess.

In the principal cities of Great Britain, the Mechanics have recently directed their attention towards the instruction of the working classes in the principles of mechanical science by means of "Mechanical institutions," at which lectures have been given on all subjects connected with the mechanic arts. These lectures have been delivered by professors of ability, selected and paid by the mechanics themselves; and have been numerous attended. Some notice of the rise and progress of these institutions, may not be improper on this occasion.

The first scientific institution established in Great Britain, by the mechanics themselves, was in the city of Glasgow. An institution had been founded, many years previously, by the will of Professor Anderson, and bearing his name, for the purpose of instructing the middle and lower classes of the people on scientific subjects. By paying a small fee, persons were admitted to hear lectures; illustrated when necessary, by experiments on most branches of science. There was a library, several models, a variety of apparatus, and a museum connected with the establishment. No branch of the "Andersonian Institution," however, was exclusively devoted to the instruction of mechanics, in those branches of knowledge, which are of especial use to their professional pursuits, till the year 1800, when Dr. George Birkbeck, a respectable physician, and man of science, commenced gratuitously a series of lectures on mechanical philosophy and chemistry.

For several years these lectures were continued ; they were also greatly extended, and were very well frequented. Dr. Birkbeck having left the institution, a disagreement arose between the mechanics and their friends, and the government of the institution ; in consequence of which, the mechanics seceded. In the year 1821-2, the mechanics of Glasgow, and their friends, formed a school, called "The Glasgow Mechanics' Institution." In November 1823, there were 600 subscribers to this institution ;—and it continues in a most flourishing condition. Institutions of a similar kind have since been established at Aberdeen, Manchester, Leeds, and Liverpool. There is a school of arts at Edinburgh for the instruction of mechanics, differing in some respects from those above mentioned.

In November 1823, a public meeting was held at the Crown-and-Anchor Tavern in London, for the purpose of establishing a LONDON MECHANICS' INSTITUTION, at which upwards of two thousand persons were present, consisting principally of those for whose benefit the institution was intended. In December following, the officers of the institution were elected. Dr. Birkbeck was chosen president.

The object of the institution is stated to be the instruction of the members in the principles of the arts they practise, and in the various branches of useful science : the means by which that object was to be obtained were,

1st. The voluntary association of Mechanics and others, and the payment of a small annual or quarterly sum each.

2d. Donations of money, books, specimens, implements, models and apparatus.

3d. A library of reference, a circulating library, and reading room.

4th. A museum of machines, models, minerals, and natural history.

5th. Lectures on natural and experimental philosophy, practical mechanics, astronomy, chemistry, literature, and the arts.

6th. Elementary schools for teaching arithmetic, algebra, geometry and trigonometry, and the different applications, particularly to perspective, architecture, mensuration, and navigation.

7th. An experimental workshop and laboratory.

In February of the present year, the institution commenced its operations;—an inaugural address was delivered by the president, and an introductory lecture, on the elementary principles of mechanics, by professor Millington, one of the vice-presidents of the institution.

There were at that time, about 1300 subscribers to this institution, and the number has since increased.

In his inaugural address, commenting upon the laws against the emigration of artisans, Dr. Birkbeck, who appears to be a man of truly liberal and philanthropic feelings, makes the following eloquent allusion to our western hemisphere.

“Far, however, be it from me to advocate the retention within the circumference of our island, of the arts and sciences, which are our best possessions, and our brightest ornaments. Over the western world, now in the sublime career of independence, calling for their aid, I would have them liberally diffused: thus in part atoning for those wrongs which followed in the train of the genius and enterprise of Columbus.

“Let European arts and European science, freely cross the western main, to enrich the gay savannahs and the vast mountain plains, in regions distinguished alike by their sublimity and inexhaustible fertility, until all that can be wafted by the winds, or that can be impelled by the all-conquering steam,

except European vices, and European warriors, may be found

"Where Andes, giant of the Western star,
Looks from his throne of clouds o'er half the world."

These sentiments, I am sure, will be reciprocated by every friend of liberty, and of the arts, in every part of the world. How unlike is this spirit, to that which actuated the French Government, when an attempt was recently made in the city of Lyons, to form an institution similar to those I have mentioned: this distinguished member of the 'HOLY ALLIANCE,' by its express command, put a stop to the project; not choosing that any institution, even of a scientific character, should be established within its domains, without its sanction, and its immediate control.*

In witnessing the progress of science and the arts abroad, and the noble institutions for their advancement, may we not derive useful hints for our improvement? And may we not flatter ourselves, that we shall receive the countenance and encouragement of those who by their wealth, talents, and influence in society, have it in their power to render us essential service? Every patriot, every friend to the arts, must wish us success in our laudable undertaking: he must be sensible that whatever contributes to the wealth, independence, and happiness of the nation, is of sufficient importance to engage his serious attention.

Let us view, then, the advantage to be derived from encouraging intelligent and skilful artisans and mechanics. The following remarks from an able writer† are to the point. "The most powerful

* See Edinburgh Scotsman. The author is aware that France has produced many men of science, and that the government of that nation has, (particularly during the reign of Bonaparte,) extended a liberal patronage to the arts: but the rigid system of its police, and its severe censorship of the press, have deprived the citizens of that fertile country of many of the privileges common to those of Great Britain and the United States.

† Chaptal.

cause of the success of a manufacture is doubtless to be found in the good quality of the articles, and the economy of their fabrication: but the most intelligent man will feel the germs of his industry languish under his hands, if other protecting causes do not facilitate their expansion. If the consumer were to order none but perfect commodities, the workman would soon turn no other out of his hands. If on the contrary the consumer cannot distinguish a faulty from a faultless production, the artist having no interest to study perfection, will, all his life, be satisfied with turning out crude performances. The consumer, therefore, forms the artist by the purity of his taste, and the correctness of his choice;—but institutions form the consumer,—and not till a good education, the study of the arts, and the sight of good models have prepared a generation, can we hope to find enlightened consumers.”

If instead of decrying every thing domestic, and praising every thing “far-fetched and dear-bought,” our fastidious consumers, would profit by the hint of the enlightened Chaptal, and be sedulous to improve their own tastes, and that of the manufacturer, they would soon see the good effects resulting from such a course, in the superiority of American productions.

The foregoing remarks are intended to apply to manufactures; and the correctness of them, as regards a manufacturing nation, will be readily perceived.

But they may with equal propriety be applied to any art. The art of building for instance.—Were those who build, to employ none but able and experienced architects and skilful mechanics, we should not have to regret so frequently, as we now do, the instances of bad taste and defective execution, in many of our public and private edifices.

The science of Architecture, although sometimes reckoned as one of the fine arts, and in its higher

and decorative branches, it may perhaps be considered as one of them, is so intimately connected with the useful arts, and employs in the executive department so large a portion of operative mechanics, that I deem it not improper in this connexion, to enlarge upon it.

This science, in our own country, is yet in its infancy; I mean, so far as taste in design is concerned. It has not yet arrived at that degree of perfection to which it has attained in the older nations of Europe.

Having as yet no regular schools of art, our architects, on whom much depends, have with few exceptions never received a professional education: they have not acquired that thorough knowledge of the exact sciences, and that cultivated taste which is thought necessary to qualify a man for an architect in Europe. They have been mostly those who, in early life, were devoted to a mechanical profession. Their youth, the season for intellectual improvement, has been spent in manual labour; and for the want of scientific institutions in our country, and books of instruction, they have never been able in after life to obtain that accurate knowledge of the principles of design and construction, so necessary to be acquired by those who are employed to furnish plans for, and to superintend the erection of important public edifices.

How often do we in travelling our country, witness, instead of that beauty which is caused in part by fitness,* a strange mixture of styles;—a profuseness of ornament, without meaning or application:—mere cuttings of the chisel and the gouge.

The authors of some of the uncouth designs which our country presents, remind one of the painter mentioned by Pope,†

* See Alison on Taste.

† Vide Essay on Criticism.

..... "Unskilled to trace
 The naked nature and the living grace,
 With gold and jewels cover every part,
 And hide, with ornament, their want of art."

The fantastic and capricious architect, without science or taste, may in his wild and extravagant designs sometimes please the ignorant, but "will often make the judicious grieve."

Although, in my remarks on architecture, I have alluded to the want of taste in design, I am happy to state that, in execution, we have many examples of excellent workmanship; and even in design, we have made a visible improvement, in many parts of our country, within a few years. We have genius and talent; and nothing is now wanting, but a due degree of encouragement to develop their powers. We are gradually discarding the frippery of Roman ornament, and are adopting the pure and chaste style of the Greeks. Already have we examples from the Parthenon, the Temple of Illyssus, and other classical designs of that refined and illustrious people.* There is a dignity, a breadth of effect, and repose in the Grecian architecture, so happily adapted to the simplicity of our republican institutions, that I hope ere long to see it generally adopted in all our public edifices. Abounding, as our country does, from Maine to Florida, from the Atlantic to the lakes, with materials of the finest quality for building, with materials for able architects, and skilful workmen,—who will say that the generations which come after us will not leave behind them memorials of the genius, taste and skill of enlightened freemen, which will vie with the proudest efforts of Athens or Corinth!

* "The great superiority of the Greeks in Architecture is to be traced to causes similar to those which occasioned their preeminence in every thing else; namely, a deep investigation into first principles,—an accurate perception of the elements of all that they attempted to execute." (See Elmes's Lectures on Architecture.)

While so much depends upon the talent and skill of the architect, it is obvious that no considerations of a pecuniary nature, should deprive the man of genius of a liberal compensation for his services. While our rich capitalists are on their guard against the visionary projects of greedy speculators, and architectural quacks,—let them patronize the man of science, and the skilful workman.

Not only may the rich capitalist show his regard for the arts by rewarding talent ; but the mechanic, who labours in the subordinate departments of the arts, has it in his power, by supporting with zeal and fidelity the man of genius whose designs he carries into effect, to render an important service to the community and the arts. The operative mechanic is to the architect, what soldiers are to the commander of an army : without able and faithful workmen, the best devised plans may fail of success, or be imperfectly executed.

It may be thought that the study of architecture is of little use to any but those who are immediately concerned in building ; but this is an erroneous idea ; there is scarcely a profession, in which it is not directly or indirectly of importance. The knowledge of its proportions and ornaments has given to many articles, manufactured in Great Britain, a decided superiority over those of other nations less conversant with the science. The proper application of its ornaments, aided by the science of chemistry, enabled Mr. Wedgwood to carry on the porcelain manufacture, to a degree of perfection and elegance, till then unknown in Europe, affording sufficient proof of the utility of this art, in professions apparently unconnected with it. The smith, the cabinet maker, the turner, the founder, and in short every workman whose business it is to give form to rude materials, will find it highly advantageous to devote a portion of his time to the study of this sublime and useful art.

The great benefits to be derived from a knowledge of the first principles of the arts we practise, are too obvious to need further illustration. Let us endeavour then to obtain them. In addition to our other appropriations, let us create a fund for the purpose of disseminating, among our fraternity, a knowledge of the sciences. We may thus lay a foundation for an institution, which, at some future period, will redound to the honour not only of our association, but to the city and country in which we live.

The mechanics of New York have founded a "mechanic and scientific institution," which was incorporated in 1822. Its plan is similar to those established in Great Britain. Professor Griscom, a gentleman of science, and well known as the author of a very interesting tour in Europe, has delivered to its members, three winters successively, a course of lectures on mechanical philosophy, and chemistry, to general acceptance.

The mechanics and manufacturers of Philadelphia have also turned their attention towards this subject, and meetings have been held in that city, for the purpose of forming an institution, similar to that in New-York;—for the want of sufficient data, I am unable to state what encouragement the project has received. There cannot be a doubt however, that, if not already formed, an institution will soon be established, for aiding the progress of the mechanic arts in that populous and respectable city.

There is no way by which instruction can be conveyed with so much facility, as by public lectures. Knowledge, imparted in this manner, is more generally attractive, and more easily retained, than when received in the ordinary method by the use of books. Lectures on Architecture, Chemistry, Mineralogy, and the various application of the mechanical powers, illustrated by suitable experi-

mental apparatus, would not fail, as I believe, of attracting, the attention, not only of our master mechanics, but of our journeymen and apprentices.

This plan, if duly patronized, would possess a twofold advantage ; it would be the means of imparting much useful information, in an economical manner, and prevent many from resorting, for amusement, to the pleasures of sense ;—inducing them to substitute, for the fashionable vices and follies of the day, the delights of intellectual and refined society.

THE APPRENTICES' LIBRARY, established in this city, and which is under the supervision of our Association, is an institution, which, if judiciously managed, is calculated to have a beneficial effect on the minds and morals of those who enjoy its privileges. As a proof of the high estimation in which APPRENTICES' LIBRARIES are held, we have only to notice the increasing popularity of them throughout our country : and even England, in this instance, has not disdained to copy from her descendants. To Boston belongs the honour of having been the first to establish this valuable institution. It is to be regretted, however, that our Library does not contain a greater number of works of real value.

If, instead of encumbering its shelves with mere trash ;—books which are seldom read, and, if read, are of no practical utility,—the donors would place on them valuable standard works, on *science* and the *arts* ;—on *history*, *geography* and *ethics*, the usefulness of the institution would be greatly enhanced.

Another important object, contemplated by our institution, is the cultivation of a good understanding among its members, in relation to apprentices. The reciprocal obligations which exist among us in this respect, should be scrupulously adhered to, by all. In our professional career, it is our duty to sustain each other ; to pay a due deference to the rights of individuals ; and, as far as in us lies, to promote the

common welfare and prosperity of our fraternity. Is one of our number more highly gifted by nature with talents; does he possess superior intellectual attainments; is he more highly favoured by fortune, than ourselves? instead of envying him his superior advantages, let us rejoice that our institution is honoured by such a man; let us entertain towards him, no other sentiments than those of friendship, affection and respect.

In the various domestic relations, it should be our sedulous care to sustain the character of sober and exemplary citizens. Industry, uprightness, and punctuality in our dealings, are necessary to our prosperity and happiness in life. If we would gain the respect of the wise and good, we must respect ourselves.

In the exercise of that heavenly attribute, CHARITY, one of the prime objects, for which our institution was formed, what a delightful opportunity is presented for the exercise of the kindlier feelings! and how true is it, that the pleasure thence arising is reciprocal. Charity

"Is twice blessed,
It bleaseth him that gives, and him that takes."

It is unnecessary for me, at this time, to recount to you the various instances, in which our funds have caused the tear of gratitude to glisten in the eye of the bereaved widow, and the destitute orphan.

What can be more grateful to a benevolent mind, than to witness the benign effects of this greatest of virtues on the sons and daughters of affliction. For nearly thirty years, have the funds of our institution, like the silent river, that fertilizes the soil through which it passes, continued to pour its gladdening streams among the families of the deceased members of our Association.

Many, who were wont to appear among us, and who have lent their willing aid to the cause of charity and benevolence, have left the scene of their earthly labours, to enjoy, as we trust, in another and a better world, the society of the just made perfect.

We should be wanting in gratitude, my brethren, did we not acknowledge the liberality of the distinguished citizens, not members of our Association, who have from time to time given of their substance to aid us in the holy cause of benevolence. They evince a just knowledge of the value of riches, who use them for the benefit of their fellow men.

The word CHARITY, my brethren, is not confined in its application to pecuniary aid alone. It is susceptible of a broader definition. It may be exercised in that mutual good-will, kindness, and brotherly love, which ought to reign among us.

When, through misfortune, or indiscretion, a member becomes reduced in his circumstances, if he have any sensibility, it is hardly possible, that he should retain that elasticity of mind, which in more propitious days he was wont to possess.

It is not the part of a good citizen, to leave such a man to brood over his misfortunes in loneliness and despair : It is not the part of a philanthropist, to "pass by on the other side ;" but it is his duty, like the good Samaritan, to pour the oil of gladness into his wounded heart : Instead of that contumelious treatment, which is the characteristic of purse-proud arrogance and unfeeling stoicism, the really benevolent man will, by kind offices, and good advice, often effect as much as could be done by pecuniary aid. By pursuing such a course towards an unfortunate man of talents and worth, he may often be rescued from the haunts of vice and intemperance, when a contrary one would drive him to desperation, and leave him a prey to all those unhappy sensations caused by poverty and neglect.

GENTLEMEN—OFFICERS AND BRETHREN OF THE
MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION :

If in this address I have departed from the course pursued by my predecessors,—if I have not attempted an historical description of the progress of the Arts, from their first introduction among mankind,—it is because I have thought it unnecessary to repeat what has already been said by others, abler than myself to do justice to the subject. In occupying so large a portion of your time, on this occasion, in endeavouring to enforce the necessity of intellectual cultivation, I have been actuated by a firm conviction of its immense importance. The controlling power of mind over matter is visible in all our operations as artisans. Its influence in a republican government, “where the people fill all the branches of the sovereignty,” is apparent to every politician. Although I would not encourage an undue attention to political affairs, a caballing spirit, yet a proper knowledge of the constitution and laws of our country should be acquired by every free citizen. The honours and emoluments of office are denied to no one, possessing talents, moral worth, and integrity of character. The annals of our revolution bear evidence of the distinguished talents and services of a FRANKLIN, a GREENE, and a SHERMAN,^a who were among the burning and shining lights that illumined the dark period of our struggle for independence.

These men, who stood forth, the champions of freedom and popular rights, were not men who had been nursed in the lap of ease and affluence ;—they were the hardy sons of toil ;—working mechanics ; whose hands had ministered to their necessities : Men, it is true, of strong original minds, improved by cultivation ; of energy of character, and firmness of purpose.

The characters of such men present us with examples worthy of imitation ;—they teach us, that, however much we may desire the patronage of others, we must depend, mainly, on our own powers, our own resources.

Should the despots of Europe again invade our shores, the same minds, which are now occupied in the pursuits of agriculture and the arts, would be called to assist in the councils of the nation, in her hour of danger. The same hands, which are now employed in the field and the workshop, would, as they were then, be exercised in repelling the invaders of our altars and our fire-sides.

Yielding to no class of men, in patriotism and public spirit, we claim that share in the public estimation, to which, as citizens of a free and independent republic, we are entitled.

In taking a retrospect of what our country was half a century ago,—without credit,—without resources,—dependent on foreign nations for the means of self defence, and for most of the necessaries and conveniences of life,—with a thinly scattered population,—comparing, I say, our state at that time, with our present flourishing condition, what abundant cause have we to congratulate ourselves on our enviable situation.

Many of you can doubtless recollect, when this metropolis, in the possession of a ruthless foe, presented nothing to the eye, but dismay and despondency. Now, it is the abode of peace, industry and enterprise :—the seat of the arts and of the muses.

When we look around us, and behold the labour of our hands in the erection of elegant and useful edifices, for the comfort and convenience of man ;—for the purposes of education, of justice, of legislation, and the worship of God ; we are filled with emotions, which are easier felt than described.

“ In the full tide of successful experiment,” it is but justice to attribute in a great measure to the talents and enterprize of the distinguished individual, who is now at the head of our Municipal government, the spirit of improvement, which at present prevails in this metropolis. Were this city Athens, *he* would be PERICLES ;—with this difference, however, that, while one was deficient in many of those traits which constitute moral worth, the other unites in his character all those qualities which adorn and dignify the upright magistrate, and the virtuous citizen. With his zeal, intelligence, and devotion to the public weal, and the assistance of his able coadjutors, we may expect a continuance of that prosperity, which has hitherto characterized our city. May the laudable spirit of improvement extend throughout our land, and throughout the whole world of mankind !

“ Come, bright improvement ! on the car of time,
And rule the spacious world from clime to clime ;
Thy handmaid arts shall every wild explore,
Trace every wave, and culture every shore.”

FINIS.

NOTES.

THE Author acknowledges, with gratitude, the polite attention of a friend* now in Europe, to whom he is indebted for the "*London Mechanics' Magazine*," a work containing much useful information relative to the present state of the Mechanic Arts in Great Britain ; and also for some other publications of merit. In those extracts, where he has not observed the precise phraseology of the originals, the author has thought it unnecessary to mark the passages as quotations.

A.

ARCHIMEDES may be considered as the true founder of the science of mechanics. The theory of the inclined plane, the pulley and the screw, have been ascribed to him. His defence of Syracuse against Marcellus gained him great celebrity among his countrymen. It is stated on the authority of Plutarch, that, by his burning glasses, he set fire to the Roman fleet at the distance of an arrow shot.

See Edin. Encyclopedia.

Although some have considered this account as fabulous, it is not so improbable, as might at first be imagined ; when it is known that Buffon, the celebrated French naturalist, actually constructed a burning-glass, with which he melted lead and tin at the distance of fifty English yards, and burnt lighter substances as far off as seventy-five yards. It was his opinion, that, with summer heat, and a better apparatus, he should be able to produce combustion at the distance of one hundred forty-two yards.

Lond. Mech. Mag.

B.

TO GALLILEO has been ascribed the invention of the Telescope, or at least a most important improvement in it. He laid

* Mr. Josiah Spurr.

the foundation of the science of Dynamics, or the action of forces, as they relate to motion. His support of the Copernican system, by which he drew down upon himself the rage of the inquisition, and his consequent imprisonment are well known ; as also his subsequent abjuration of the opinions which he had so zealously espoused, and which exhibits a mortifying instance of human imbecility. *See Edin. Ency.*

C.

To Dr. FRANKLIN belongs the honour of having discovered what is termed *plus* and *minus* electricity ; the explanation of the Leyden phial ; and the identity of lightning and electricity. These are his most brilliant discoveries, and, with his profound knowledge of political economy, his sound judgment, and the excellent practical tendency of his writings, have probably gained him a higher reputation abroad, as a writer, and a man of genius, than any other American has ever enjoyed. *ib.*

D.

Sir RICHARD ARKWRIGHT was bred a barber ; but his great improvements in the machines for spinning cotton have discovered genius and talents of the first order. His most important invention is the *substitution* of machinery for the human finger. This great invention has caused a complete revolution in the art of cotton spinning. Speaking of this distinguished mechanic, Professor Griscom has the following remark :—" It would be difficult I think, to name an individual, with the whole civilized world before us, whose inventive powers are better entitled to the grateful applauses of his country." *Vide Year in Europe, Vol. 2.*

E.

"Mr. WATT's improvements in the steam engine, were so great as to give it almost a new form. Instead of the general practice, which was to condense the steam in the same cylinder in which the piston works, Mr. Watt, after many trials, fell on a plan of saving much of the waste heat and fuel, by causing the steam to pass into a separate vessel for condensation, so that the iron cylinder in which the rarified steam was admitted, to cause the next stroke of the engine, was never cooled at all, and no heat wasted in again bringing it to a proper temperature. This was the first great improvement made by Mr. Watt, and he calculated that it saved nearly two thirds of the steam generated, and fuel consumed." At a meeting recently held in London, for the purpose of erecting a monument to the memory of Watt, the president of the Royal Society (Sir Humphrey Davy) pays the following tribute to his genius. " He was obliged to bring all the mechanical powers, and all the resources of his own fertile mind into

play ; he had to convert rectilineal into rotatory motion, and to invent parallel motion. After years of intense labour, he obtained what he wished for, and at last placed the machine entirely under the power of the mechanic, and gave perfection to a series of combinations unrivalled for the genius and sagacity displayed in their invention, and for the *new power* they have given to civilized man."

London Mech. Magazine, Vol. 1.

F.

The great discovery of our countryman, FULTON, in the application of steam to the purposes of navigation, can hardly be considered of less importance, than the previous inventions of Watt. Mr. Fulton presents one of the most remarkable instances of perseverance under difficulties and discouragements, which can be found in the history of the arts. Had he not possessed

————— " a dauntless soul to persevere,
Though mountains rise, though Alps appear,"

he never would have succeeded in bringing to perfection an improvement which will cause his name to be remembered, as long as the Hudson or the Mississippi, shall roll their waves. His friend, Mr. Colden, has endeavoured to do justice to his character ; but no eulogium can be too great for a man who has rendered such signal service to his country and the arts.

I might have added to this list, the name of another American, whose extraordinary discoveries in regard to the properties of steam, are at present the theme of panegyric on both sides of the Atlantic. But as the improvements of this eminent mechanician, have not ygt been sufficiently tested by time, I forbear to enlarge, as I am satisfied that the public will do ample justice to them.

G.

Dr. FRANKLIN, who has before been alluded to, is so well known, that any further remarks relative to him would be superfluous.

It may not be generally known that General NATHANIEL GREENE, who has been considered as *second only* to WASHINGTON, in point of talents and military skill, was bred an anchor smith.

See Johnson's Life of Greene.

ROGER SHERMAN, one of the signers of the declaration of independence, was in early life, a saddler, but by his own industry and application, acquired an education, which enabled him to sus-

tain many important offices, with honour to himself and benefit to his country. He was a member of the first Congress in 1774, and continued in it for many years. He was a member of the convention which formed our present constitution. He was also a senator in the Congress of the United States.

See Allen's Biographical Dictionary. 1809.

STATE OF THE FUNDS
OF
THE MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION.
OCTOBER, 1824.

In 6 per cent. U. S. Stock	\$100 00
„ 7 „ Do.	200 00
100 shares in Manufacturers' and Mechanics' Bank . .	5,000 00
50 shares in Globe Bank	5,000 00
Other Property belonging to the Association	250 00
Reversionary Right in late Mr. William Breed's estate	1,000 00
Advance on Bank Stock may be calculated at	750 00
	<hr/>
	\$12,300 00

ODES AND SONGS.

WRITTEN FOR THE SIXTH TRIENNIAL FESTIVAL OF THE MASSACHUSETTS
CHARITABLE MECHANIC ASSOCIATION.

ODE.

BY CHARLES SPRAGUE.

[Sung after the delivery of the Address, at the Church in Lynde Street.]

1.

WHEN from the sacred garden driven,
Man fled before his Maker's wrath,
An Angel left her place in heaven,
And crossed the wanderer's sunless path.
'Twas ART! sweet ART! new radiance broke,
Where her light foot flew o'er the ground,
And thus with seraph voice she spoke,
"The CURSE a BLESSING *shall be found*."

2.

She led him through the trackless wild,
Where noontide sunbeam never blazed;—
The thistle shrunk—the harvest smiled,
And nature gladdened as she gazed.
Earth's thousand tribes of living things,
At ART's command to him are given,
The village grows, the city springs,
And point their spires of faith to heaven.

3.

He rends the oak—and bids it ride,
To guard the shores its beauty graced;
He smites the rock—upheaved in pride,
See towers of strength and domes of taste.
Earth's teeming caves their wealth reveal,
Fire bears his banner on the wave,
He bids the mortal poison heal,
And leaps triumphant o'er the grave.

4.

He plucks the pearls that stud the deep,
 Admiring BEAUTY's lap to fill ;
 He breaks the stubborn marble's sleep,
 And mocks his own Creator's skill.
 With thoughts that fill his glowing soul,
 He bids the ore illumine the page,
 And proudly scorning time's control,
 Commences with an unborn age.

5.

In fields of air he writes his name,
 And treads the chambers of the sky,
 He reads the stars, and grasps the flame
 That quivers round the Throne on high.
 In war renowned, in peace sublime,
 He moves in greatness and in grace ;
 His power subduing space and time,
 Links realm to realm, and race to race.

Odes, &c. sung at Faneuil-Hall.

SONG.

THE MARCH OF MIND IS WITH THE FREE.

BY LEWIS G PRAY.

TUNE.—"Columbia, Land of Liberty."

I.

When SCIENCE from her slumbers rose,
 Resuming all her ancient pride,
 She strode triumphant o'er her foes,
 And spread her conquests far and wide.
 But slavish systems old and strong,
 Stay'd the bold impulse learning gave ;
 And Monarch of the mighty Song,
 Man still remain'd the servile slave :
 To teach the Nation God's decree—
 ' The March of Mind is with the Free.'

II.

At length the COMPASS led her West,
 Where Freedom nurs'd her infant day ;
 Thither the Pilgrim Fathers prest,
 To find a place in peace to pray :
 Then Cities rose as Forests fell ;
 And ART adorn'd what Wealth uprear'd :
 The PRESS stood forth bold Truths to tell ;
 But still the Mind, the Monarch fear'd :
 To teach the Nations God's decree—
 ' The March of Mind is with the Free.'

III.

To quell the foes against her met,
 Then Freedom urg'd her votaries on ;
 In danger cheer'd by LAFAYETTE—
 To Victory led by WASHINGTON,
 And since those proud and glorious days,
 Our course has been through seas of light ;
 On all has Learning shed her rays ;
 And Science banish'd Gothic night :
 To teach the world this great decree—
 ' The March of Mind is with the Free.'

A SONG,

WRITTEN FOR THE MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION, 1824.

BY HENRY J. FINN.

" That it may please thee to defend and provide for the fatherless children, and widows,
 and all that are desolate and oppressed."

FOLKS tell us the Fine Arts are all talismanic,
 But we'll prove there's more magic in Arts call'd Mechanic ;
 For Humanity's spirit now reigns in our hearts,
 And Charity's sure the most *lib'ral* of Arts.

Derry down, &c.

First in War, first in Peace, and he'll ever be first
 In the hearts of his Countrymen, here he was nursed ;
 Till our WASHINGTON labour'd, and gain'd our release,
 Though a Master in *War*, he work'd well by the *Peace*,

Derry down, &c.

Here's to freedom's Mechanic, *our National Guest*,
 As a friend and a freeman, the bravest and best !—
 All the Heroes of *Seventy-six*, and by heavens
 Then our foes found they all were at *sixes* and *sevens*,
 And down, down, &c.

On such social *fōrms*, our *Printers* ne'er set up,
And sure, in such *cases*, no workman will get up,
"The *proof* of the pudding's in eating," folks cry,
But the *Devil* himself knows they're not fond of *pie*.

Derry down, &c.

Cordwainers, when old they are beginning to *wax*,
Know their *soul* has no *end*, and their *uppers* no *tacks*,
So when to death's *lap-stone* their *all* they commit,
May snug and *long quarters* succeed their *last fit*,
When they're down, &c.

Our *Tailors* from this jolly board will ne'er *sheer* off,
Since such *measures* are taken the white *cloth* to clear off;
In defence of our Freedom, they know how to *fell*;
They can *collar*, *cuff*, *baste*, and send foes into —,
Down, down, &c.

We'll *rivet* attention to *Coppersmiths* too,
May their *steam-boilers* ne'er put the folks in a *stew* :—
Our *Tinmen* have *hammer'd* their *plates* one and all
Into *funnels* of Charity in *Faneuil Hall*,
Derry down, &c.

Our *Dyers* are true men, though much used to *lie*,
In Humanity's cause they won't scruple to *die*.—
Our friend the *grave-Stone Cutter*, gratitude wins,
For his Charity covers a great many sins,
When we're down, &c.

Our *Bookbinders* work by the *nut* and the *screw*,
When their *sheets* are all *fair*, be the *cover* true *blue*;
Their alliance be holy, unlike *Austria* and *Prussia*,
Or the *unletter'd* slaves that are all *bound* in *Russia*,
Where they're down, &c.

Our *Mastmaker* *spars* not with one brother *swigger* ;—
Our *Ropemakers* frequently act with some *Rigour* ;—
Our *Sailmakers'* work always weathers the gale,
And their votes, at a *canvass*, will ne'er be for *sale*.
Derry down, &c.

May our *Bakers* *roll* on, and to Charity's *meal*,
(Till their *ashes* are cold) may they ne'er make *appeal*;
May their *full-crumb* sustain the hard *lever* of woe,
And in life's ample *trough*, may they ne'er *need* John *Doe*.
Derry down, &c.

Our *Painters* develop the *signs* of the time,
May they ne'er want a *coat*, when they're past their best *prime* :
As they can't drink their *Easel*, as Shakspeare would call it,
They'll not *brush*, while such *colours* remain for their *palette*,
Which go down, &c.

Our *Carpenters* will not com-plain a great deal,
 If their *hand* is but set to the right sort of *ciel*.—
 Our *Pumpmakers* feeling oft puts in a pucker,
 When such subjects are *handed*, they're sure to give *succour*.
 Derry down, &c.

Our *Hatters* defend our *Republic's* renown,
 Tho' they wish every man to live under the *Crown* ;
 Like Old France, they would bring to the *block* every cap,
 And do homage at last to imperial *Nap*,
 Who is down, &c.

Our *Clockmakers* suit not our enemies' liking,
 If they once move their *hands*, the effect is most *striking* ;
 Our *Watchmaker's spring*, that's the juice of the grape meant
 In this *Watch glass*, from which there's I'm sure no *escape-meant*.
 Unless down, &c.

Our *Shipwrights*, and *Millwrights*, and *Housewrights*, and
Wheelwrights,
 Should the voice of oppression but breathe to repeal rights,
 The *Millwright* would *Clack*, and the *Housewright* would *flame*,
 The *Wheelwright* be *Spokesman*, the *Shipwright* would *frame*.
 A down, &c.

Our *Turners*, I guess, must come in for their *turn*,
 May they keep fortune's *top* till they go to the *urn* ;—
 Our *Workers* in *Stucco* old maids ought to flatter,
 They're the boys who can put a *good face on the matter*.
 Derry down, &c.

May our *Saddlers* ne'er lack a good *saddle* of mutton
 To their *cloth*, when a poor, but old friend, wants to cut on.
 Here's a *stave* to the *head* and the *heart*, of each *Cooper*,
 And a sigh to the mem'ry of one noble *Hooper*,
 Who is down, &c.

Our *Glass-blower's lustre* is lent to a brother,
 He *sees through his own errors*, and pities another.—
 Our *Engravers*, of course, must fall into the *line*,
 A *proof* the *impression's* remarkably *fine*.
 Derry down, &c.

Our *Sugar-refiners*, too, gladly we meet,
 For *Charity's* sure to have them in her *suite* ;—
 Our *Brewers* must put in their *oar* at this feast,
 For may we net call them wise men of the *Yeast* ?
 Derry down, &c.

From the *Rock* of the *Mason* life's waters we bring,
 They are pour'd forth as pure as the scriptural spring,
 As the *Iris* of Heav'n, the heart of Hope cheers,
 To the Widow and Orphan, our *bright Arch* appears.
 Derry down, &c.

Here's a health to our *Mayor*, while he fills such a station
 He'll ne'er be in want of a good *Corporation* ;
 But the length of this ditty my conscience upbraids,
 So I hope that you'll pardon a *Jack of all trades*.
 Derry down.

ODE.

ALL HAIL TO THE ARTS.

BY COL. JOHN H. EVERETT.

TUNE.—"*Adams and Liberty*."

I.

WHEN God bade the Earth "*BE*" from Chaos and night,
 And smiled on the form of his lovely creation ;
 He blessed the new mansion with beauty and light,
 And gave it to man for his fair habitation.
 'On the wide land, I give thee,
 Go cheerful to toil ;
 And gain with thy hands,
 The rich fruits of the soil ;
 And full be the harvests thy labours increase,
 With the blessings of Health, and the safety of Peace.'

II.

Then fell the hill-forest, and lo ! in its place,
 Fair temples arose at the voice of Devotion ;
 Deep fields spread their tributes of plenty and grace,
 And cities rock-built fence the borders of Ocean.
 But more dear than the fortress,
 More blest than the dome,
 Was the low-roof he builded
 And called it "*a HOME*,"
 Which smiles o'er the harvests his labours increase,
 With Affection and Love in the safety of Peace."

III.

He tempts the dark ocean and launches afar,
 His castles high-winged to its uttermost distance,
 To bear the deep voice of his thunders in war,
 And win lovely peace, by a gallant resistance ;

Or in nobler employ,
 The full blessings to spread,
 Of the labours of Art,
 And the products of Trade—
 And in Enterprize crown'd bid his treasures increase,
 With the Glory of War, and the safety of Peace.

IV.

And hail to the Art, which its Glory has found,
 By Freedom and Truth the vast world to enlighten ;
 To cast the pure lustre of knowledge around,
 And kindle the torches that bless as they brighten ;
 To weakness lend strength,
 To oppression redress ;
 To Freedom its triumph,
 All hail to the Press,
 And hail to the Light which its labours increase,
 Of Science and Art in the safety of peace.

V.

And hail to our Land, may her pathway be spread
 With the Heaven-cherished gifts of Truth, Virtue, and Science ;
 And Fame track her foot-steps wherever she tread—
 Her Arts built on Virtue, in God her reliance :
 Her banner in triumph
 O'er ocean be borne—
 And the wise, and the brave,
 Her bright records adorn,
 And to ages on ages her Glories increase,
 With the triumphs of War, or the safety of Peace.

SONG.

STEAM POWER.

BY MR. JOHN HOWE.

TUNE—"Derry Down."

With old Archimedes we've nothing to do,
 Who would move the whole globe with a lever and screw ;
 One modern invention would upset his whole scheme,
 And show this great world's moved entirely by steam.
Derry down, down, &c.

Euclid sure must have liv'd in a barbarous age,
 Though rank'd as a prime math'matician and sage ;
 And Pythagoras knew but little 'twould seem,
 For his *single Ereuka*, we've now a *whole team*.
Derry down, &c.

Had Franklin continued about forty years more,
 We might show him discov'ries, ne'er thought on before—
 And which old Philosophers never could dream,
 How that Science and Arts were perfected by *Steam*.
 Derry down, &c.

And were we to lump former great men together,
 There would be little difference found betwixt either ;
 They knew not, poor souls, that posterity's scheme,
 Would solve all their problems entirely by *Steam*.
 Derry down, &c.

There's young spark in love, and the old one in debt
 Who depend upon promise, unrealiz'd yet—
 Their prospects and promises are nothing but *trawl*,
 It is *Steam* rewards love, and 'tis *Steam* pays the cash.
 Down, down, &c.

The Theorist's projects, the Merchant's account,
 The bills of Mechanics, whate'er the amount,
 And the hopes of promotion in office, we deem,
 Are often, too often, paid *wholly by Steam*.
 Derry down, &c.

There's the Epicure, friend both to butcher and cook,
 Who has studied each page of great Kitchener's book ;
 Of Count Rumford's invention will frequently dream,
 Where fifty choice dishes are, at once, mov'd by *Steam*.
 Derry down, &c.

'Twere sufficiently easy to show that the *Fair*
 Can be managed by *Steam* just as other things are ;
 And 'tis settled at once, which all can attest,
 That *high pressure principles* suit them the best.
 Derry down, &c.

One thing still remains, which 'gainst our age is scor'd,
 That we'll always renew and redeem round this board,
 'Tis our country's, 'tis honour's, 'tis gratitude's debt,
 Which shall never be paid in *Steam* to FAYETTE.
 Derry down, &c.

ODE.

HAIL TO THE HERO WHO VISITS OUR CLIME.

BY A LADY.

TUNE—"Wreaths for the Chieftain."

HAIL to the Hero! who visits our clime,
 Wreath'd with the laurel his bravery bought,—
 O'er the *transits of empire* he rises sublime!
 And comes in his *fame* to the land where he *fought*.
 A nation shall meet him,
 A nation will greet him—
 With hearts that can *love*, and with souls that can *feel*;
 ILLUSTRIOUS LAFAYETTE,
 THINE we can ne'er forget—
 While powder explodes, or while death is in steel!

Hail to Columbia! the birth place of glory,
 Her motto is Liberty, Courage her shield,
 Inscrib'd be her name in the annals of story,
 Wise in the Senate, and brave in the field,—
 May her Sons emulate,
 All that is good and great,
 Glorious in war, and illustrious in peace,
 May Agriculture yield
 Stores from her fruitful field,
 May Factories thrive, and may Commerce increase.

Hail to the Arts! and long may they flourish,
 May the Altars of Fame with their tributes be graced,
 May Science approve and patronage nourish
 The efforts of Genius, the offerings of taste,
 Oh! may the magic wand
 Of STEWART'S all powerful hand,
 Descend with his *fame* to *embellish* our clime,
 Still may the pencil save
 From oblivion's dark grave,
 All that is beautiful! great and sublime!
 Hail to the *glorious* "INVENTION OF LETTERS."

That open'd the flood-gates of SCIENCE to man!
 When Genius sprang lightly, releas'd from her fetters,
 And spread to the World, her celestial plan;
 The plants she had nourished,
 The flowers she had cherish'd—
 Grew *lovely*, but *wild*, in her own native clime,
 'Till she rais'd them from earth,
 And gave them new birth!
 And bade them *exist in the pages of time*!

The following subject is recommended to the consideration of the members of the Mechanic Association, and they are requested to consider if it be not for the interest of the whole society to join in the project; whether it would not tend to increase the number of associates, and to keep in remembrance the families of many deceased brethren, who might need even the small income which the fund now affords, but which in time will reach to a large amount.

WIDOWS' AND ORPHANS' FUND.



TO encourage the industrious, to aid the unfortunate, and to administer relief to the afflicted, are the principal objects of the Massachusetts Charitable Mechanic Association. To increase the usefulness of a Society, so deserving the support of all classes in the community, especially Mechanics; to make it the medium of more extensive good; to add to its numbers; and to bind with stronger ties those connected by its various interests; the establishment of an additional fund has been contemplated, the usefulness of which will extend beyond the life of its contributors, and shed its rays over the darkness of the tomb. The interest of this Fund will be forever devoted to our Widows and Orphans, and give them a right to receive that, which gratuitous charity, coldly and sparingly administered, can never be expected to yield. For the purpose, therefore, of laying the foundation of so good a design, a number of members of the Association met at the house of Mr. David Francis, on the evening of March 26th, 1821, and having organized the meeting by the appointment of John Cotton, Esq. as Moderator, and Mr. David Francis, as Secretary, proceeded to frame the following RULES for the government of the Subscribers, which were unanimously adopted, and the Secretary requested to hand a copy of the same to every Member, for consideration and acceptance.

ARTICLE I. .

This Fund shall be called *THE WIDOWS' AND ORPHANS' FUND*, and be in the care of the Treasurer of the Massachusetts Charitable Mechanic Association.

ARTICLE II.

It shall be created by the payment of *Five Dollars*, on subscribing, and increased by quarterly assessments of *Twenty-five Cents* on each subscriber.

ARTICLE III.

The money to be immediately put at interest, and the whole interest to be distributed yearly among the families of deceased Subscribers, in proportion to the number of children in each : A Committee of the Subscribers to apportion the same.

ARTICLE IV.

The Widows and Children of Subscribers only are to receive the benefit of this Fund.

ARTICLE V.

In counting the number of children in the distribution of this money, boys beyond fourteen years, and girls beyond eighteen years of age, will be excluded. Widows will cease to be recipients when re-married.

ARTICLE VI.

Widows without children, or whose children have grown beyond the limited age, shall receive the same as widows with one child.

ARTICLE VII.

Subscriptions may be made for more than one right, and the Subscriber's family be regarded accordingly in the distribution.

ARTICLE VIII.

A Subscriber neglecting or refusing to pay his assessments for more than one year shall forfeit his right, but his widow and children and they only, shall receive, at his death, (provided they come within the rule of Article 5,) half the amount of monies which said delinquent shall have paid into the Fund.

ARTICLE IX.

This Fund may be incorporated with the other funds of the Association, whenever all the members thereof shall become Subscribers.

ARTICLE X.

No alteration shall be made in these articles, but by a majority of the votes of all the Subscribers.

SUBSCRIBERS' NAMES
To the Widows' and Orphans' Fund.

BENJAMIN RUSSELL	-	One Share.	\$5
JOHN COTTON	- - -	"	5
DAVID FRANCIS	- - -	"	5
BENJAMIN DARLING	- - -	"	5
SAMUEL PERKINS	- - -	"	5
ISAAC DUPEE	- - -	"	5
CHARLES MOUNTFORT	- - -	"	5
CHARLES C. NICHOLS	- - -	"	5
JOHN DOGGETT	- - -	"	5
GERRY FAIRBANKS	- - -	"	5
JOSEPH T. BUCKINGHAM	- - -	"	5
GEORGE DOMETT	- - -	"	5
GEDNEY KING	- - -	"	5
JONATHAN HUNEWELL	- - -	"	5
GEORGE DARRACOTT	- - -	"	5
JONATHAN KILHAM	- - -	"	5
JOHN ROULSTONE	- - -	"	5
THOMAS DEAN	- - -	"	5
EDMUND MUNROE	- - -	"	5
WILLIAM JACKSON	- - -	"	5
SAMUEL S. WILLIAMS	- - -	"	5
JOHN CLAP	- - -	"	5
JONATHAN WILLIAMS	- - -	"	5
JOHN ANDREWS	- - -	"	5
CHARLES A. WELLS	- - -	"	5
SAMUEL T. ARMSTRONG	- - -	"	5
NATHANIEL FAXON	- - -	"	5
*SIMON GARDNER	- - -	"	5
FRANCIS JACKSON	- - -	"	5
ENOCH HOBART	- - -	"	5
NATHANIEL EMMES	- - -	"	5
ALPHEUS CARY	- - -	"	5
JOHN WINSHIP	- - -	"	5
JOSEPH S. READ JR.	- - -	"	5
JOHN P. THORNDIKE	- - -	"	5

* Mr. Gardner deceased the past summer; his widow will of course receive the interest from the time of his death.
 One hundred and seventy-five Dollars are now in the Savings Bank.

MEMBERS

OF THE

Massachusetts Charitable Mechanick Association,

With their different Occupations.

Abbot, Samuel, *cooper*
Abrahams, Benjamin, *cooper*
Adams, Daniel, *block and pump maker*
Adams, Edward, *ropemaker*
Adams, Samuel, *tinplateworker*
Adams, William, *watchmaker*
Adams, William, *blacksmith*
Alger, Cyrus, *ironfounder*
Allen, John, *housewright*
Amee, Jacob, *sailmaker*
Amee, Jacob L. C. *sailmaker*
Andem, Moses, *ropemaker*
Andrews, John, *sailmaker*
Archbald, George, *cabinetmaker*
Armstrong, Samuel T. *printer*

Bacon, Addison, *wheelwright*
Bacon, Robert, *hatter*
Badger, Joseph, *pump & block maker*
Badger, William, *brass-founder*
Baker, David, *leatherdresser*
Baker, William, *painter*
Baaga, James C. R. *painter*
Banister, John F. *cooper*
Barry, James, *cooper*
Barry, James, Jr. *cooper*
Barker, James, *cabinet-maker*
Barton, Henry H. *saddler*
Barstow, Jacob, *cooper*
Bassett, Joseph, *cooper*
Bates, Adna, *housewright*
Bates, Martin, *hatter*
Beak, Samuel, *coppersmith*
Bell, Nathaniel E. *bricklayer*
Bell, William D. *sailmaker*
Blanchard, Simon, *cabinet-maker*
Blood, Thomas H. *hatter*
Bradlee, Thomas, *book-binder*
Brewer, Clark, *tobacconist*
Brigham, Benajah, *bricklayer*
Brintnall, Samuel, *mastmaker*
Brown, Israel, *tailor*
Brown, James, *cooper*

Bryant, Gridley, *mason*
Bryant, Nathaniel, *cabinet-maker*
Buckingham, Joseph T. *printer*
Bugbee, Am, *painter*
Bugbee, Edward, *hair cutter*
Bullard, Jabez, *housewright*
Burckes, Lewis, *cabinet maker*

Callender, Benjamin, *tailor*
Call Abraham, *tailor*
Carleton, William, *tinplateworker*
Carter, Cephas, *bricklayer*
Cary, Alpheus, *stone-cutter*
Caswell, Richard, *ropemaker*
Clap, Chester, *tailor*
Clap, John, *cabinet maker*
Clark, Edward D. *brass-founder*
Clark, Benjamin, *cooper*
Clark, Humphrey, *tailor*
Clark, John, *tobacconist*
Cobb, Elias, *blacksmith*
Comey, Benjamin, *mastmaker*
Cornell, Walter, *shoe-manufacturer*
Cotton, John, *painter*
Cotton, Nathaniel, *housewright*
Cotton, Solomon, *painter*
Crafts, Charles, *saddler*
Crehore, Edward, *hatter*
Creighton, George, *cooper*
Crocker, Uriel, *printer*
Curtis, Samuel, *clock dial maker*
Cudworth, Peter, *housewright*

Darling, Benjamin, *plumber*
Darling, Samuel, *housewright*
Darracott, George, *tinplateworker*
Davis, Henry, *cooper*
Davis, Isaac, *comb-manufacturer*
Davis, James, *brass-founder*
Dean, Thomas, *printer*
Dennis, Samuel, *bricklayer*
Dewhurst, Thomas, *tinplateworker*
Doggett, John, *gilder*

Doggett, Samuel, *gilder*
 Domett, Charles M. *saddler*
 Domett, George, *saddler*
 Downing, Oliver, *housewright*
 Drew, Job, *cordwainer*
 Dupee, Isaac, *pump & block maker*
 Dyar, George W. *clock maker*
 Dyer, Ezra, *tailor*

Eaton, Thomas, *saddler*
 Eayres, Moses, *housewright*
 Edes, Samuel, *baker*
 Ellis, David, *hatter*
 Emmes, Nathaniel, *gunsmith*
 Emmes, Nathaniel Jr. *gunsmith*
 Emmons, Thomas, *cooper*

Fairbanks, Gerry, *hatter*
 Fairbanks, George S. *baker*
 Fairbanks, Stephen, *saddler*
 Farrie, John, *cooper*
 Faxon, Caleb, *edge tool maker*
 Faxon, Nathaniel, *cordwainer*
 Fay, Windsor, *distiller*
 Felt, David, *book-binder*
 Fernald, Oliver, *coppersmith*
 Francis, David, *printer*
 Fullick, James, *painter*

Gaffield, Thomas, *cordwainer*
 Gilbert, Samuel, *printer*
 Gooch, Samuel, *cooper*
 Gore, Christopher, *painter*
 Gould, John R. *book-binder*
 Gray, Edward, *housewright*
 Green, John Jr. *painter*
 Grover, Nathaniel, *shipsmith*
 Guild, Chester, *currier*

Hall, John, *silkdyer*
 Hamilton, James, *watchmaker*
 Hancock, Henry K. *cabinet-maker*
 Harbh, William, *mastmaker*
 Harris, Isaac, *mastmaker*
 Harrington, Jonathan, *bricklayer*
 Harrington, Ephraim, *bricklayer*
 Hart, Samuel, *mason and pavier*
 Hartt, Samuel, *ship builder*
 Hartshorn, Caleb, *hatter*
 Hastings, Joseph, *tallow-chandler*
 Hastings, Simon, *housewright*
 Hendley, James, *tinplateworker*
 Hichborn, Samuel, *sailmaker*

Hicks, Zechariah, *saddler*
 Hill, Samuel, *ship-smith*
 Hills, George, *housewright*
 Hobart, Enoch, *tailor*
 Howe, Nathaniel, *cooper*
 Howland, Benjamin, *housewright*
 Hughes, Thomas, *hatter*
 Hunewell, Jonathan, *bricklayer*
 Hunt, Joab, *ship-joiner*
 Hurlburt, Truman R. *tinplateworker*

Jackson, Francis, *tallow chandler*
 Jackson, George, *tallow chandler*
 Jackson, William, *tallow chandler*
 Jenkins, Joseph, *housewright*
 Jennings, Alexander H. *blacksmith*
 Jennings, William, *wheelwright*
 Johnnot, Oliver, *tailor*
 Jones, Ezekiel, *watchmaker*
 Jones, Joseph, *sailmaker*
 Joy, Abner, *stonecutter*

Kendall, Enoch, *haircutter*
 Kendall, Thomas B. *sailmaker*
 Kilham, Jonathan, *tailor*
 King, Gedney, *mathematical instrument maker*
 Kreuger, John, *harness maker*
 Kuhn, John, *tailor*

Lathrop, Beth, *housewright*
 Lane, Frederic, *ivory turner*
 Leman, John, *shipsmith*
 Lemon, William, *upholsterer*
 Lewis, Joseph, *baker*
 Lewis, Winslow, *cordage manufacturer*
 Lilly, John, *umbrella maker*
 Lincoln, Heman, *housewright*
 Lombard, Nathaniel K. *sailmaker*
 Loring, Benjamin, *bookbinder*
 Loring, John G. *coppersmith*
 Loring, Jonathan, *sailmaker*
 Loring, Josiah, *bookbinder*
 Loring, William, *cooper*
 Lovering, Joseph, *tallow chandler*

MacAllaster, James, *housewright*
 Mackintosh, Peter, *blacksmith*
 Marsh, Ephraim, *housewright*
 Mears, Elijah, *tailor*
 Messenger Daniel, *hatter*
 Messenger, Henry, *hatter*
 Mills, Oliver, *housewright*

Molineaux, John, *brass-founder*
 Mountfort, Charles, *sailmaker*
 Mountfort, Joseph, *cooper*
 Monroe, Edmund, *printer*
 Monroe, Daniel, *watch-maker*

Nash, Joseph, *sailmaker*
 Nason, Levitt, *tailor*
 Newell, George S. *housewright*
 Nichols, Charles C. *tailor*
 Nichols, Cushing, *bricklayer*
 Nichols, Eleazar, *housewright*

Oakes, Joshua, *shipjoiner*
 Oliver, Hubbard, *tailor*
 Oliver, Ebenezer, *boat-builder*
 Otis, George W. *housewright*
 Otis, Isaac, *cabinet-maker*
 Owen, Benjamin, *cooper*

Parris, Alexander, *architect*
 Penniman, John R. *ornamental painter*
 Perkins, Jacob, *engineer*
 Perkins, Samuel, *painter*
 Phillips, James, *ropemaker*
 Peince, Isaac, *cooper*
 Pitts, Lendall, *housewright*
 Pook, Charles, *cooper*
 Parkitt, Henry, *cooper*

Rand, Aaron, *cooper*
 Rayner, John, *chaise-maker*
 Read, Joseph S. *saddler*
 Renouf, Edward, *printer*
 Richardson, Bill, *housewright*
 Richardson, Luke, *hair worker*
 Ripley, Robert, *cooper*
 Ross, John, *haircutter*
 Roulstone, John, *bookbinder*
 Rowe, Thomas, *printer*
 Russell, Benjamin, *printer*
 Russell, John, *printer*

Safford, Daniel, *blacksmith*
 Sampson, Zephaniah, *bricklayer*
 Sargent, Edward, *cooper*
 Sargent, Loring, *mason and pavier*
 Saville, John, *tailor*
 Scott, Isaac, *block & pump maker*
 Shaw, Jesse, *housewright*
 Shaw, John A. *ropemaker*
 Shute, Ebenezer, *housewright*

Smith, Isaac, *cooper*
 Smith, Jeremiah P. *painter*
 Southack, Francis, *baker*
 Spear, James, *cooper*
 Spear, William, *cooper*
 Stebbins, Samuel, *block & pump maker*
 Stimpson, Charles Jr. *bookbinder*
 Stowell, Thomas, *machine maker and millwright*
 Sumner, Thomas W. *housewright*

Thaxter, Seth, *housewright*
 Thayer, Ephraim, *wheelwright*
 Thayer, Stephen, *engine builder*
 Thompson, John, *cooper*
 Thorndike, John P. *bricklayer*
 Tileston, Charles, *halter*
 Tirrell, Thomas, *cordwainer*
 Todd, Jacob, *baker*
 True, Benjamin, *printer*
 Tuckerman, John, *baker*
 Tuttle, Samuel, *tailor*
 Tuttle, Turell, *mason and pavier*

Vannevar, Alexander, *cooper*
 Vannevar, John, *bricklayer*

Wade, John, *boatbuilder*
 Walker, Francis, *cooper*
 Washburn, James, *shipwright*
 Wear, John, *housewright*
 Weld, James, *baker*
 Wells, Charles, *bricklayer*
 Wells, Charles A. *bookbinder*
 Wells, John, *cooper*
 Wells, Thomas, *bookbinder*
 Weller, George, *tailor*
 Whall, William, *gunsmith*
 Whall, William Jr. *gunsmith*
 Whitmarsh, Thomas, *tailor*
 Whitney, Jonathan, *bricklayer*
 Wilkinson, Simon, *ship carpenter*
 Williams, Jonathan, *leather dresser*
 Williams, Samuel S. *gilder*
 Williams, William, *distiller*
 Wilson, James, *brushmaker*
 Winship, John, *soap-chandler*
 Wise, Daniel, *cordwainer*
 Wiswell William, *cordwainer*

Yendal, Samuel, *boat-builder*

HONORARY MEMBERS.

Hon. JOHN ADAMS.
 Hon. CHRISTOPHER GORE.
 Hon. JOHN BROOKS.
 Hon. WILLIAM PHILLIPS.
 Hon. WILLIAM GRAY.
 Hon. JOHN C. JONES.
 Hon. JAMES LLOYD.
 Major-General LA FAYETTE.

GOVERNMENT

OF THE

MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION.

October 1834 to October 1835.

Government meetings.

Samuel Perkins, <i>president</i>	Oct. 27.
Joseph Jenkins, <i>vice-president</i>	Dec. 1.
Joseph Lovering, <i>treasurer</i>	Jan. 5.
David Francis, <i>secretary</i>	

TRUSTEES.

George Domett	Feb. 2.
Francis Southack	March 2.
Simon Wilkinson	March 30.
Joseph S. Read	April 27.
John P. Thorndike	May 25.
Enoch Hobart	June 29.
John Winship	July 27.
George W. Otis	Aug. 31.
John Rayner	Sept. 28.

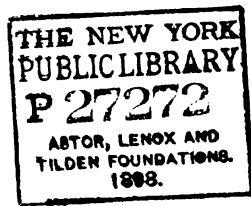
1830
THE NEW YORK
PUBLIC LIBRARY
P 27272
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1908.

2.

MR. BUCKINGHAM'S
ADDRESS.

★ MASS. HIST. SOC.





AN

A D D R E S S

DELIVERED BEFORE THE

MASSACHUSETTS

CHARITABLE MECHANIC ASSOCIATION,

AT THE CELEBRATION OF THEIR,

EIGHTH TRIENNIAL FESTIVAL,

OCTOBER 7, 1830.

BY JOSEPH T. BUCKINGHAM.

BOSTON :

PRINTED FOR THE ASSOCIATION.

1830.

7 classes

: D

TO
THE MEMBERS
OF THE
MASSACHUSETTS
Charitable Mechanic Association,
THE FOLLOWING ADDRESS
IS RESPECTFULLY DEDICATED,
WITH A SINCERE WISH THAT IT WERE MORE WORTHY OF
THEIR ACCEPTANCE,
AND A REGRET THAT IT IS SO FREEBLE A RETURN FOR THE
KIND REGARDS,
THEY HAVE UNIFORMLY MANIFESTED FOR
THE AUTHOR.

A D D R E S S .

WHAT IS THE CHIEF END OF MAN ? What the object of the mighty effort, in which men of all nations, ranks, characters, and capacities, are engaged ? For what is it that the Politician practises all the arts and devices, which nature, and education, and ambition, can supply, and, in one respect at least, imitates the example of an apostle, becoming all things to all men ? For what does the Merchant wander from his home, turning his back upon all its endearments, shutting his eyes to the sweet smile of beauty, and stopping his ears to the breathings of affection, braving the treachery of the ocean and the perils of untried climates, hazarding property, liberty, and life, his all, and sometimes, alas ! more than all his own, to the chances of war, and fire, and piracy, and tempest ? For what does the Farmer, with painful solicitude, observe the clouds and the winds, and, with restless apprehension, mark the phenomena that usher in the seed time and harvest, while he exhausts his physical strength and robs his limbs of the rest and relaxation, which are their honest due ?

What prize is that, which invigorates the arm of the Mechanic, and stimulates the inventive faculty of the Artizan, while they plod on through winter's cold and summer's heat—now scorching under meridian suns, and now shivering in the damps of midnight darkness—now delving in tunnels under the beds of mighty rivers, and now, with daring foot, threading the circuit of the lofty dome, or scaling the pointed steeple, midway from earth to heaven? What is it, which is to requite the Scholar for the desolation of health, the consumption of vigor, the havoc of intellect, produced by his labors in polishing a period or in solving a problem? And, to close this series of interrogations, to what end does the religious enthusiast shut up his senses against the fascinations of nature and the sympathies of humanity, while he strains his ingenuity and libels reason, making to himself a God after his own likeness, and tormenting all the rest of mankind, who refuse to honor and adore the image he has set up?

This inquiry is deeply interesting, and involves considerations, which must affect the condition of every human being in every stage of existence. The answer must be a general one; and an attempt to apply it to the present character of individuals and associations, and to concerns of every-day occurrence, is all that will be proposed or required on the present occasion. To others, whose peculiar office it is to admonish or instruct from this place, belongs the duty of illustrating and enforcing these considerations with reference to another world and a future life. I

will not intrude upon their consecrated ground, nor trespass on the province of the spiritual teacher. Be it mine to speak of men in their social and temporal capacities; be it his to fit them for intercourse with holier spirits, in a more enduring habitation.

The inquiry proposed is deeply interesting; and, whatever the statesman or the philosopher, the philanthropist or the misanthrope, the man of business or the man of pleasure, may offer in reply, the answer, in a single word, is **HAPPINESS**. But though the object of our labor is so apparent—though the temple is ever in sight—the avenues, which lead thither, are not so distinctly visible. They are shadowed with clouds, and enveloped in mists; and he, who commences the pilgrimage, though the point where all the avenues centre may be ever present to his eye, little knows what dangers and difficulties beset his path—through what fires and floods he must walk—what giants and demons may assault him and defeat his purposes. Human life is a life of uncertainty and hope, of discouragement and expectation; and he who rejects the conditions, must relinquish his title to the freehold.

By far the greater portion of mankind have found that personal and individual happiness is promoted by association; that the highest state of enjoyment is that, in which there can exist an interchange of sentiment, opinion, and feeling—a comparison and coincidence of taste and inclination—a convention of purposes and means; and this disposition in men to unite with others, having congenial tempers, similar

habits, and common interests, was the origin of society.

Man is a being that loves himself. All his natural desires and propensities have a conservative tendency. Every moment of his existence he is striving—often, perhaps, unconscious of the effort—to make that existence more agreeable. It is only to augment his capacity for enjoyment—to increase his power of obtaining individual happiness, and to facilitate the fruition of his desires, that he consents to unite his efforts with those of his fellow-men. These general principles are inherent in his nature, and are interwoven with every fibre of his physical and intellectual composition. They exist from necessity, and must continue to exist as long as man himself shall endure. No truth is more sacred or immutable than the oft-repeated maxim, “Self love and social are the same.” To every thinking mind it is a self-evident proposition, though its commonness has subjected it, sometimes, to the sneer of superficial moralists, as an apology for licentiousness and profligacy. Philosophically viewed, it lies at the foundation of the whole moral system. It is, in a modified sense, the essence of the Divinity.

And what is the moral system, but a combination of elementary principles, a coacervation of fundamental truths, embracing the duties, obligations and responsibilities of men, living together in society?—obligations and responsibilities founded in necessity, because the chief good cannot be attained without the employment of the requisite means? The

knowledge of these means constitutes the science of ethics.

Morality, in this extended sense of the term, is another name for Public Spirit. And what is Public Spirit? I use the definition of one who wrote more than a hundred years ago.* It is a combination of every laudable passion, and takes in parents, kindred, friends, neighbors, and every thing dear to mankind. It is the highest virtue, and embraces almost all the others—steadfastness to good purposes—fidelity to one's trust—resolution in difficulties—defiance of danger—contempt of death—impartial and active benevolence to all mankind. The office of Public Spirit is to combat fraud and delusion—to reconcile the governors and the governed—to expose imposture—to resist oppression. It fills the country where it operates with industrious and happy laborers, and the town with intrepid and useful citizens; and maintains the whole in liberty, plenty, ease, and security. Public Spirit is a passion to promote universal good, even at the hazard of personal pain, loss, and privation. It is one man's care for many, and the concern of every man for all.

Men are not always ruled by *principle*, but oftentimes by *passion*. Almost every action is an evidence that friendship for themselves extinguishes their regard for others, and that they adopt or reject prin-

* This definition, together with the substance of the next three paragraphs, is abridged, with some variations in language in order to adapt the sentiment to this age and country, from "*Cato's Letters*," published in London, about the year 1720.

ciples, just as these principles promote or contravene their passions. The good they do to each other is not always done because it is just, nor because it is commanded; nor do men always refrain from the commission of evil deeds because they are unjust or forbidden: but every thing is done from choice or from fear. The best, as well as the worst, actions are selfish, and self love is thus the parent of moral good and evil.

Men suit their principles, too, to the circumstances they are in, or the circumstances they would be in. When their point is gained, their principles are forgotten. Statesmen and politicians have one set of principles when they are *in power*, and another when they are *out of it*. They that command and they that obey have seldom the same motives. Men change with their condition, and opinions change with men. Truly was it said by a celebrated French philosopher, "The understanding is the tool of the heart."

I repeat, that every passion, which men have, is selfish to a greater or less degree. When, by the agency of these passions, individuals or the public are benefited, and the consequences of their operations are such as tend to the general good; they may properly be called *disinterested*, in the common acceptation of that word. A man is disinterested, and then only, when the views of his mind and the purposes of his heart combine to produce and to secure the safety, security, and happiness of others—when his own personal pleasure and gratification and glory

consist in the service of his fellow-men. In any other sense than this, there is no such thing as disinterestedness. The best actions often arise from fear, or vanity; or shame; or some other passion equally unworthy in itself. When the passions of men operate in such forms, and are exercised in such modes; as to encourage enterprise, promote useful inventions, reward industry, enlarge the circle of social affections, or in any way produce good to society, the motive is called virtue, morality, public spirit, and, in our modern phraseology, *Patriotism*. On the other hand, when the passions produce the opposite effects, the motive is properly called selfishness, dishonesty, lust, meanness, and other names of infamy and reproach. To pretend that men act independently of their passions, is an absurdity, which none but a fool, a madman, or a hypocrite, would advocate.

In these desultory remarks, I am not aware that any new doctrine is promulgated. I am sure that the sentiments are not original with me, and I can hardly claim any property in the language, in which they are clothed. The reason of their introduction at this time and place must be obvious to every auditor; the fitness of their application requires no extraordinary degree of ingenuity to make it apparent. What is the association, which I have now the honor of addressing, but a confederation of individuals, governed by the same interests, operated upon by the same motives, excited by the same passions, and acting in the aggregate as when each is acting for himself individually? What is it, but a link in the

grand chain of humanity, which embraces countless multitudes of organized, sensitive, susceptible, sympathetic, intelligent creatures?—a term in that sublime series of causes and effects, which, before His spirit moved upon the waters, the Creator ordained to govern and hold together his moral and intellectual offspring, till the energies of his own creative power should cease to operate.

A middle station in the order of society—a position removed at a suitable distance from the extremes of mendicity and wealth—is usually believed to be the happiest. If happiness consisted only in possession, men, perhaps, would illustrate their faith in this doctrine by their daily practice ; but daily experience shows us that anticipation and hope are ingredients essential, I had almost said indispensable, to individual happiness. We are never content with what we have, but with that, which we labor to get, and which we believe we shall some time or other possess. This unextinguishable desire for more, whatever we may already have, is the spring of industry ; that it is, which gives birth to invention, and imparts vigor to enterprise ; that it is, which sustains and cheers men of all ages and capacities, through days and years of incessant and unsuccessful labor, with minds tortured on the rack of expectation and hope, to mature some plan, by which poverty may be exchanged for competence, and competence for wealth.

In these middling ranks of society—middling as it regards wealth and poverty—we find the farmers, the mechanics, the manufacturers, the traders, who

carry on, professionally, the ordinary operations of buying, selling, and exchanging merchandize, and most of the merchants. Under this division of society may also be ranked all, who depend on the active employment of their faculties, whether physical or intellectual, for the subsistence and education of themselves and families—all, who, by such employment, are continually adding something to the stock of private property, and taking nothing from the public chest.

There is another class—I will not call it a higher one, for in our republic the distinctions of higher and lower, in reference to privilege, employment, and rank, are unknown—who, by inheritance, or by singular success, are rich, who are subjected to no necessity of manual labor, and who, for the most part, are incapable of any mental exercise beyond that of calculating interest on notes and bonds. These naturally assimilate, and around them are attracted, the idle, the vain, the showy, and all float together on the surface of society; and if, like butterflies, in a few sunshiny moments, they have strength and activity enough to display their gaudy wings a little higher than the horizontal level, a shadow kills their buoyancy, and, as evening approaches, they are not to be found. But individuals of this character are almost too few to form a distinct class of themselves. Most of our rich men (Heaven be praised!) have more generous hearts, more generous sympathies, more of that self love, which identifies itself with public spirit.

A third class are the poor—those who are poor from ignorance, vice, feebleness of mind, and a few from unavoidable misfortune. These, from necessity, if not from choice, unite also as a distinct class. Between these two classes—the unproductive poor and the unprofitable rich—which have few or no qualities or characteristics in common, there naturally exist a jealousy and distrust, which might, under supposable circumstances, break out into open hostility, were there no intervening class to stand between the extremes and prevent a collision. This is composed of those who labor in the various employments and professions before enumerated—whose enterprise, activity, and success, have not given them entire independence of labor, but have raised them above dependence on the kindness, caprice, or patronage of others. Such men can never consider the appropriate name of *middling class* a reproach, but one of honorable distinction. They form the most numerous class, and consequently the most powerful. From their distinguished position and their predominating influence in society, they may be compared to the central streak in the rainbow, which is the broadest and most distinctly developed, while its hues intermingle and coalesce with those of the outer edges so delicately, that the sharpest eye cannot discern the line of separation, nor trace out its undefinable boundary. This middling class is the security of the rich against the depredations of the poor, and the protection of the poor against the oppression of the rich. Its influence softens the vindictiveness of avarice,

and chastens the wantonness of pride ; it encourages desponding humility, soothes the sorrows of suffering, assuages the repinings of despair, and checks or subdues the temptations of the oppressed to undertake desperate or unlawful remedies.

This middling class of society is, at least, half made up of mechanics—hard-laboring, industrious, practical mechanics. The obligations, which society owes to this class of citizens, are universally acknowledged. If the occupation of a mechanic can, in any part of the world, be cause of reproach, or if the name could ever be made to imply any thing dishonorable, this is not the region, nor is this the day, for either the one or the other. You, who hear me, need no prompter to remind you of men, who, though bred in workshops, have honored, embellished, and defended your country. That grateful country knows and remembers that the mechanics have ever been foremost in her cause, when she has had battles to be fought or wrongs to be avenged. They have given statesmen to her councils, generals to her armies, and plenipotentiaries to establish her rights at foreign courts, who met the cunning policy of foreign diplomatists with sagacity and prudence equal to their own. In the war of the revolution, they boldly faced the mercenary troops of her unnatural parent, and forced that haughty parent to relinquish its claim to dominion over her soil and her sons. The soil of this country is theirs ; they fought for it ; they bled for it ; their fathers died for it ; and perish the tongue that shall ever consent to relinquish one particle of

its dust to foreign domination or domestic despotism.

The impossibility of enjoying the elegances, or even the conveniences of life, without the services of the practical mechanic, is too apparent to require more than a moment's notice. The most powerful monarch cannot maintain his state without him. The most splendid palace, like his own humble habitation, is indebted to his skill and labor. The walls and all that they enclose, whether made for use or for show, for comfort or for embellishment, are all the work of his hands ; and while the fortunate possessor reclines on the costly couch, or feeds from dishes of gold and silver, the mechanic, who made the palace and its furniture, shares with him his independence, and enjoys the fruit of his or his ancestor's most profitable speculations.

Again—Look at the mechanics as members of the great political community. To them, in common with all other classes of men, is entrusted the most important power that can be exercised in the nation—that of electing rulers and magistrates ;—and, from their numbers, they can always exercise a preponderating influence in all elections. If they do not constitute an actual majority over all other classes, they form such an emphatic plurality, that they may be said to hold in their hands the issue of all elections, and can say which candidate shall be safely seated in the descending scale, and which shall kick the beam.

In another point of view the influence and the power of mechanics is important. To them is confided the duty of educating a large portion of the young—and this duty is not confined to their own offspring, as numerous, probably, as the children of any other classes. But on them devolves the obligation to instruct and to train to industrious habits and virtuous principles, an immense body of apprentices—a generation of young men, to whom, in their turn, are to be committed the same duties and privileges. On the mechanics, then, rests a most solemn responsibility, and their country demands and expects a most righteous and rigid discharge of it. No set of men can do more towards forming and sustaining a national character; for the character of a nation is nothing more than the aggregate of individual and personal character. While, from motives connected with private interest, mechanics demand of their apprentices a punctual observance of the stated hours of labor, and diligent attention to lessons of skill and dexterity in their employments, let them not forget the claims of society and their country. Let their apprentices be inspired with a devotion to justice, honor, and truth. Let them be taught, both by example and precept, their social and civil rights, their moral and political obligations. Let them be taught the virtues of punctuality, sobriety, frankness, and generosity; let them be taught to respect themselves, and you will seldom find one so obstinate or untractable as to withhold the respect he owes to you and to society. Let them be taught that art, which is

superior to all others—the science of self-government and self-control—

**Art, that may be pursued without a crime,
And leave no stain upon the wing of time.**

It is to the middling class that the commonwealth looks for her main support; it is to them she is chiefly indebted for the vigorous and enterprising recruits which supply the waste of population by emigration and death. Celibacy prevails among other classes; (whether from necessity, or choice, or fashion, need not now be considered;) but among active mechanics, a bachelor of thirty is as rare as a phoenix among birds, though much less an object of admiration or desire—and among practical farmers, he is as useless, as unseemly, and as much dreaded, as snow in summer or rain in harvest.

If the middling class of the people be well educated, it is not possible that they can suffer individual oppression. If they be united in purpose, it is not in the power of a moneyed aristocracy (if such a body of men exist among us), nor of any political projector, under whatever cloak, or name, or watchword, he may attempt to play the demagogue and gull the common ear, to deprive them of their influence in all the measures of the government, or of their share in all its offices, emoluments, and honors. Their voice must be heard; their strength must be felt; and, let any bold and unprincipled man, or body of men, attempt to stifle the one, or break down the other, a million of tongues would be loosened to pour forth the sentence of condemnation, and a million of hands

prepared to execute it. A man must be an idiot, and incapable of judgement—he must be a knave, endeavoring to impose upon mankind a conviction that they are fools—or he must be a madman, imagining all others to be crazy, who should set himself seriously and soberly to work to convince the mechanics of this country—the laboring and producing classes—that they suffer privations and disabilities, that are not felt by all other men. That individual instances of oppression and wrong have occurred, and will again occur, is doubtless true; “when went there by an age” that fraud, and cunning, and avarice, were not sometimes successful in sacrificing a victim? We have not yet arrived at that perfect state of society, the long-expected Millenium. So long as men are born with human passions, and wherever these passions are permitted to grow and strengthen without cultivation and discipline, so long and so widely will the consequences of uncultivated and undisciplined passions be felt and lamented. The remedy for this is Education. The one all-efficient remedy is Moral and Religious Education. Let men be taught that independence—the only independence worth having—is an absolute and entire reliance on their own personal efforts. Let them be taught that their chief good is to be found in the enjoyment of subdued appetites, disciplined passions, temperate habits, moderate desires, well-informed minds; and I know not what further agency man can have in hastening the approach of that period, when

All crime shall cease, and ancient fraud shall fail,
 Returning Justice lift aloft her scale,
 Peace o'er the world her olive wand extend,
 And white-robed Innocence from Heaven descend.

Admitting what is sometimes contended for, that the middling classes have not their due proportion of influence in the public affairs—if, as a body, they would regain what they have lost, or achieve what properly belongs to them, in this respect, they must sacrifice all personal considerations, all motives of a merely selfish character, on the altar of public spirit. There must be no jealousies, and envyings, and heart-burnings, at the success, which distinguishes one above another. If candidates for public office should be selected from their ranks, there should be no paltry opposition, growing out of the supposed neglect of imaginary, or even real, claims of others. Prejudices of this sort avail nothing in favor of those that indulge them, but they often defeat the best of purposes, and weaken the strength of the whole body. It is an unnatural discontent, and may lead to divisions, injurious to the public welfare, as well as unjust to private feeling, which the life of man may not be long enough to repair.

Would the middling and laboring classes preserve in their own hands the powers and privileges they now possess, and perpetuate the possession in the hands of their children, they must watch the signs of the times and keep pace with the progress of improvement. They must never weary nor tire in the pursuit of knowledge ; they must allow neither sleep to their eyes nor slumber to their eyelids, while there

is important knowledge to be obtained, important principles to be unfolded, important rights to be secured. Let them see that their country has no cause to reproach them with treachery or neglect. That country is yet in its youth. Compared with some of the kingdoms of the eastern continent, it yet retains, in its physical features, all its virgin freshness, and exhibits the recent touches of its great Maker's hand. It is for you whom I address, and such as you, and your contemporaries of the middling classes, to carry on the work of improvement ; to plant cities in her deserts and towns in her waste places ; to convert her forests and rocks into houses that shall unite elegance and comfort—into ships for the transportation, and warehouses for the storing and vending of the merchandize that accumulates in our seaports—into churches, and temples, and edifices for public use, that shall add improvement and beauty to the face of nature, and give ease and safety and gladness to the heart of man. In that career of public spirit, which constructs canals, rail-roads, aqueducts, manufactories, and every species of work that can contribute to public convenience and private enjoyment, it is yours to lead the van. Men of capital may furnish the means, but it is your ingenuity and invention, your contrivance and skill, your perseverance and industry, that must accomplish the work. Let no one ask, if you *can* do it. You can do whatever you *will*. There is not in the world—I say it with feelings of pride as a mechanic and of patriotism as an American citizen—there is not in

the world a more virtuous, and patriotic, and efficient class of men, than the American Mechanics. "There is no better sign of a brave mind, than a hard hand."

The Duke of Orleans, now the King of the French, when he was driven from his country and deprived of the income of his estates, would not, like many of the nobles and princes of the blood royal, among whom was Charles X, become a beggar to the English Government, but chose rather to become a professor of mathematics in a Swiss college, and actually earned a subsistence by teaching arithmetic and geometry. This showed that he knew the value of an independent mind, and that he was fitter for a king than the miserable mendicant he succeeds. No man of mature age and strength is fit to live among men, who is too idle or too ignorant to employ the means necessary to furnish his daily bread. Least of all is he fit for a ruler, who is unacquainted with the arts, which give subsistence to his subjects.

Give me whereon to stand, exclaimed Archimedes, and with my lever I will move the world. The mechanics of these free and independent states can do as much; they can make as proud a boast as the Grecian Philosopher, and they are not, like him, without a safe position on which to plant themselves, while they put the power in operation. The influence they possess as a body is daily increasing. An awakening spirit is abroad among them, and stirring them up to the establishment of schools, lyceums and institutions for purposes of education, and for uniting and directing their energies to the advance-

ment of literature, and arts, and sciences. The highest honor of a mechanic, or any other man, consists in the cultivation of his mind ; because it is mind, that controls and directs every thing else. It is mind, which pursues, preserves, and enjoys happiness ; it is the mind alone, of all earthly possessions, which is eternal ; mind is the only attribute of our nature which exalts us to the likeness of our Maker—the only one, in which the image of God is reflected.

“ It is the mind that makes the body rich.” It is wisdom and understanding that make the man independent. Ignorance is, of all slavery, the most degrading. Chains and fetters may be made of gold as well as of iron, but neither the one nor the other can keep down the energies of an intelligent, well-cultivated, independent mind—a mind trained in the school of virtue, and imbued with principles of honesty, integrity, firmness, honor, and that self love, which forms the basis of the social system. The power of such a spirit is uncontrollable and unlimited ; its elasticity can no more be subdued than that of the vital fluid, which sustains its physical organization. Prison walls cannot confine it ; nor mountains nor seas set bounds to its operations.

Do you ask what is the evidence to support so broad an assertion, look at your own doors. Look at your public schoolhouses, which, from year to year, send forth their hundreds of boys and girls, instructed in the elements of all that is indispensable, and of much that may be superfluous in education, forming a basis, on which they may build a fabric of

moral and intellectual power, which no commotion can place in jeopardy, no revolution can overturn or destroy. Look at your infant schools, where woman—the first and best instructor of human ignorance, the first and last supporter of human weakness, the purest and noblest nourisher of human affections—waits and watches for the development of the yet unformed idea, and, from the instant of its birth, nurses it in tenderness, and trains it with holy fidelity, till it shall acquire strength and firmness, to be handed over to its ruder teacher, man. Cast your eyes back, only for a few days, and see your spacious Common, crowded with the beautiful, the innocent, the wondering, the inquiring young, whose intelligent eyes asked of every passer-by in that splendid pageantry which marked your centennial festival, “What mean ye by this service and these testimonies?” Look on these things, and ask yourselves if you do not perceive in them the workings of a restless, deathless spirit of Independence—the glimmering of an unquenchable spark of Patriotism, which a breath can raise to a flame—the consciousness of an indestructible and ever active mind, susceptible of all that is great and good, or elevated and honorable—an unearthly essence, which may be prepared for weal or wo—a blessing or a curse, to itself and to all surrounding existence.

Look abroad, too, over the face of your vast and almost illimitable continent, and behold multitudes, which no man can number, impatient of the slow process of education, wrestling with the powers of

nature and the obstructions of accident, and, like the Patriarch, refusing to let go their hold till the day break and they receive the promised blessing and the recompense of the struggle. You will perceive, too, in the remotest corners where civilization has planted her standard, there the Press, the mightiest engine ever yet invented by the genius of man, is producing a moral revolution on a scale of grandeur and magnificence, unknown to all former generations. By it, information of every transaction of government and of all important occurrences in the four quarters of the world, is transmitted with a degree of speed and regularity, that the most sagacious could not have foreseen, nor the most enthusiastic have dared to hope for, fifty years ago. By the Press, every cottage is supplied with its newspaper and elementary books in the most useful sciences, and every cradle is supplied with tracts and toy-books to teach the infant to lisp lessons of wisdom and piety, long before his mind has power to conceive or firmness to retain their meaning. The power of this engine, in the moral and intellectual universe, is inconceivable. There is no ordinary operation of the physical elements to which its mighty influence can be compared. We can find only in the visions of the apocalyptic Saint a parallel to its tremendous action. Guided by truth and reason, like the sound of the seventh trumpet, it opens the temple of God in Heaven, and shows to the eye of the faithful and regenerated spirit, within the veil of that temple, in the presence-chamber of the Almighty, the ark of his testament.

Controlled by falsehood and fraud, its force, like the opening of the sixth seal of the mystic volume, produces earthquakes, turns the sun to sackcloth and the moon to blood, moves every mountain and island out of their places, and causes even the heaven we hope for to depart as a scroll when it is rolled together.

But if the first illustration, which meets you whenever you open your eyes to what is going on in your immediate presence, be too common, and fail to convince from the mere circumstance of its familiarity, and if the second be too bold and fanciful, turn your eyes eastward, and let them rest upon disenthralled and regenerated France. The sound of her thanksgiving at the triumph of public spirit over mean and selfish despotism, swells in every gale, and floats on every Atlantic wave. The public spirit of a few determined Printers, aided by no other engine of warfare than the Press, has expelled a blind and misguided monarch from the throne of his ancestors, and driven his stultified ministry from the palace of its power. Yes—let it be repeated—the Press, acting on public opinion, sustaining, encouraging, and cultivating public spirit, has produced almost a bloodless revolution in one of the proudest kingdoms of the world. The prophetic voice of the people—in this case most emphatically the voice of God—proclaimed in tones of thunder to the besotted monarch—“Forasmuch as thou hast disobeyed the commandment, which the Lord thy God commanded thee, thy carcass shall not come into the sepulchre of thy

fathers." Terrible as the volcano's burst, rapid as the progress of thought, the appalling denunciation is executed. The Lion came up from his thicket, the Avenger went forth from his place, to make the palaces of the proud desolate, to overturn the throne of the haughty, to set the people free, to open the prison-doors of the mind, and redeem it from the power of the oppressor. The fool of his own folly flies from the face of an insulted people; hissed from his throne, he becomes a vagabond in his native land—a mark of contempt and scorn to those, who were once his subjects—an object of aversion to his fellow-monarchs, without the poor consolation of their sympathy—a living, breathing body, but without the power of doing mischief, as he had before been without the willingness to do good. And men, as they pass, stop and gaze at the wonder—the Lion standing by, in appeased and silent dignity, content to have been the minister of Heaven's decree—

The Lion preys not upon carcasses.

But it is time to stay these wanderings of thought, and to put an end to these indefinite and almost intangible generalities. You, my friends, in obedience to whose call I am here, are aware that this has been one of the most prolific seasons in an age that is proverbially an age of orations. Public celebrations, of one kind or another, have followed each other in rapid succession, and the same newspaper, which tells of one that is past, tells also of one that is to come, till the public eye is almost weary of

gazing at the show, and the public ear begins to sicken with the sound of the approaching procession. Orators and Poets have preceded me, admonishing the popular feeling, instructing the popular mind, and delighting the popular taste, and what could be expected of me, the last and least of the train? Happy those Orators and Bards—

The abundant harvest, recompense divine,
Repays their work—the gleanings only mine.

Would you, my brethren and associates, accomplish the object of your association? would you attain the end of your existence? would you possess the chief good? Remember your motto. *Be just, and fear not.* Love yourselves.

To your own selves be true,
And it must follow, as the night the day,
You cannot then be false to any man.

Let this sacred maxim be written in golden capitals on the tablets of your memory. It is the dictate of religion, the sum of the moral law, the essence of patriotism. Reverence and practise it, and it will be a crown of abiding glory, when titles, wealth and honors shall be of no further use—for these must be laid aside when you pass the threshold of immortality.

Since the last celebration of this triennial festival, seventeen of our associates have deceased. Of these all, but three, participated with us in the festivities and congratulations of the day. Some of them had been with us, almost from the beginning of our insti-

tation; some had been active and useful officers. Some were rich in years as well as in the respect and affection of their brethren; others were taken from us and their families in the noon of life, the meridian of manhood, full of hope and expectation, and promise of happiness to come. To offer a more ample and respectful tribute to their memories would be grateful to my feelings, but time will not permit the indulgence. Neither is there time for the solemn reflections, which present themselves to the mind, when we perceive so many of our friends and associates taken from our presence in the brief space of three years. They have passed—Peace to their souls—honor to their memories.

We, too, are passing away, though yet but pupils in the great school of Nature and Providence. We may build temples and tombs and monuments, whose duration, compared with the longest term of human life, may be counted long; the works of our hands may remain for centuries; but the designer and the builder, he who contrives and he who executes, he who labors and he who enjoys, “come like shadows, so depart.” There is but one way, in which we can perpetuate our existence on the earth. The productions of mind are, in their consequences, eternal, and in those consequences we can secure immortality. The soul of the present age can live in the soul of all its successors. Our descendants can be quickened by the spirit of their fathers. We can leave behind us some memorial of virtuous principle, and we can carry with us, from this land of shadows to that

realm where all is reality, the consciousness of having improved the talent, which our master has entrusted to our keeping ; and we can carry with us, too, the hope that this delightful Paradise of our own and our fathers' creation, which shall bloom over our ashes, may continue to bloom, and brighten, and extend, for virtuous, happy, and improving posterity, till Time, no longer sustained on fluttering wing, shall sink in the ocean of Eternity.

Great Spirit, Deepest Love,
 Who rulest and dost move
 All things that live and are —
 Whose woods, rocks, seas, surround us,
 Whose heavens only bound us,
 Whose lamp feeds every twilight wave with fire, —
 Spirit of Beauty, at whose soft command,
 The sunbeams and the showers thy gifts distil,
 Come, with thine harmonizing ardors fill
 And raise thy sons —
 Be man's high hope and unextinct desire,
 The instrument to work thy will divine !
 Whatever, Spirit, from thy starry shrine,
 Thou yieldest or withholdest, O let be
 This city of thy worship ever free !

THE MASSACHUSETTS

CHARITABLE MECHANIC ASSOCIATION

Was instituted in March, 1795 ; and incorporated, by Act of the Legislature of Massachusetts, in March, 1806.

Its funds are created chiefly by the admission fees of members, and the annual assessment of two dollars. The whole amount of the funds, now permanently invested, is \$14,000.

On the decease of a member, his family are presented, by the Treasurer, with forty dollars. The annual average of beneficiaries, on the charity list, is thirty.

A School has been kept three months in each year, for several years past, for the instruction in reading, writing, and arithmetic, of the apprentices of members who are disposed to avail themselves of the privilege.

A course of Scientific Lectures is instituted, at which each member is admitted gratuitously, and is furnished with a transferable ticket for his friend, child, or apprentice. These lectures usually last from October to April. The lectures for the present season commenced on the second Monday in October, with an introductory by the Rev. Mr. FROTHINGHAM, and will be continued through the season by the following gentlemen :—
HON. E. EVERETT, HON. A. H. EVERETT, HON. WM. SULLIVAN, and Drs. FLINT, GRIGG, PARK, ROBBINS, SMITH, STORER, and WARREN.

Officers of the Association for the present Year.

DANIEL MESSINGER, *President.*

JOSEPH T. BUCKINGHAM, *Vice-President.*

JOHN COTTON, *Treasurer.*

JOSEPH LEWIS, *Secretary.*

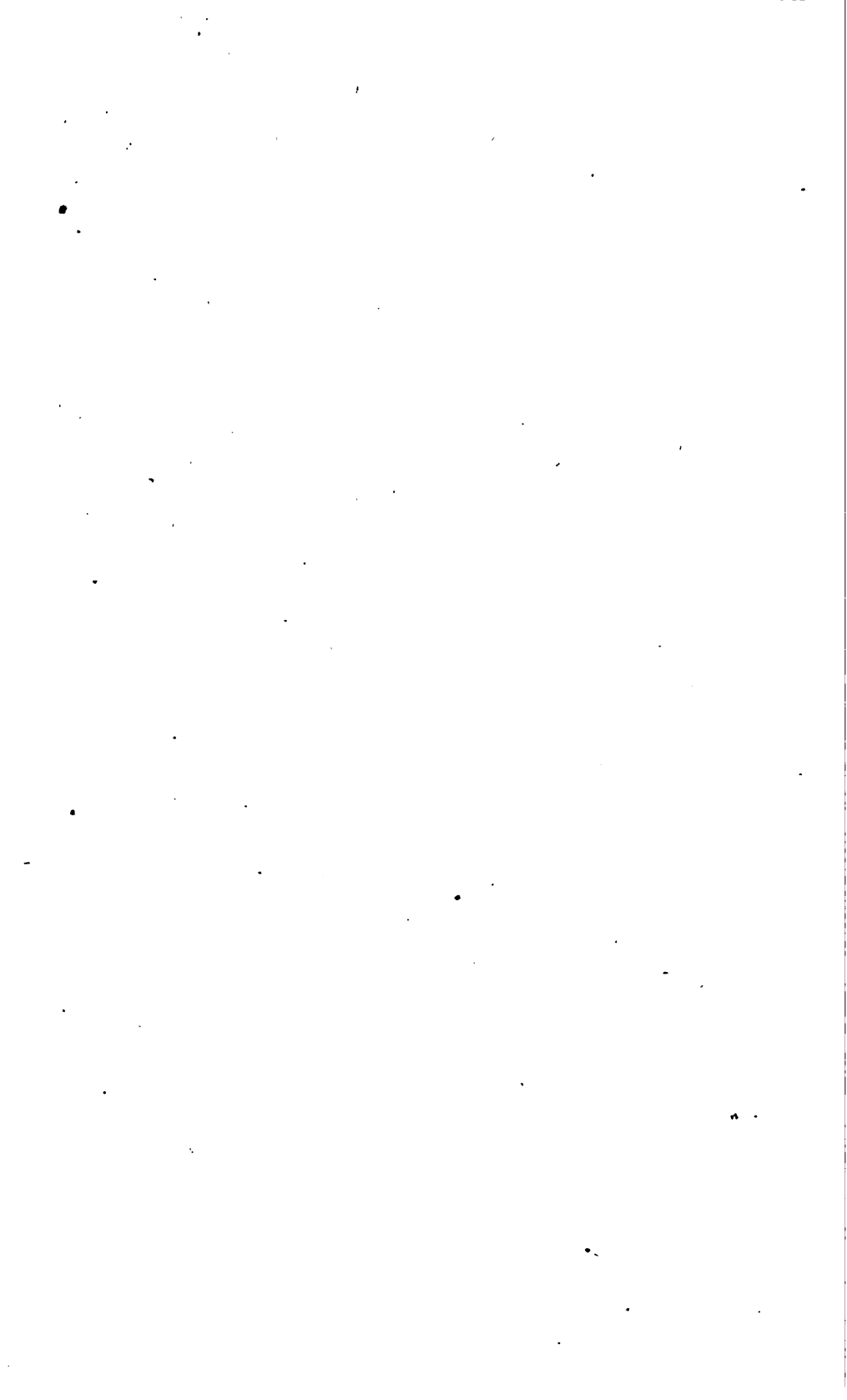
TRUSTEES.

ABRAHAM CALL,
JACOB TODD,
JAMES McALLASTER,
EDWARD D. CLARK,
JOHN KUHN,

URIEL CROCKER,
THOMAS WHITMARSH,
MARTIN BATES,
SAMUEL S. WILLIAMS.







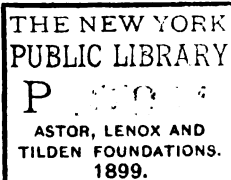
AN

3

ADDRESS

DELIVERED BEFORE THE

MASSACHUSETTS



CHARITABLE MECHANIC ASSOCIATION,

20th SEPTEMBER, 1837,

ON OCCASION OF THEIR

FIRST EXHIBITION AND FAIR.

BY EDWARD EVERETT,

HONORARY MEMBER OF THE ASSOCIATION.

★ MASS. Hist. Soc.
Boston:

PUBLISHED BY DUTTON AND WENTWORTH,
FOR THE ASSOCIATION.

1837.



AN

ADDRESS

DELIVERED BEFORE THE

MASSACHUSETTS

CHARITABLE MECHANIC ASSOCIATION,

20th SEPTEMBER, 1837,

ON OCCASION OF THEIR

FIRST EXHIBITION AND FAIR.

BY EDWARD EVERETT,

HONORARY MEMBER OF THE ASSOCIATION.

Boston:

PUBLISHED BY DUTTON AND WENTWORTH,
FOR THE ASSOCIATION.

1837.

R. A. H.



Boston, *September 23, 1837.*

DEAR SIR,

The undersigned, in behalf of the Executive Committee of the Board of Managers of the Exhibition and Fair of the Massachusetts Charitable Mechanic Association, have been charged with the pleasant duty of soliciting of your Excellency, for the press, a copy of your highly appropriate and eloquent address, delivered before the Institution on the evening of the 20th instant. Believing that the publication of it will be of great public utility, and gratifying to every member of the Association, we feel the strongest assurance that you will accede to the wish of the committee.

With the highest consideration,

We are, most respectfully,

Your obedient servants,

STEPHEN FAIRBANKS,

JAMES L. HOMER,

JAMES CLARK.

To His Excellency EDWARD EVERETT.

Boston, *29th September, 1837.*

GENTLEMEN,

I am duly favored with yours of the 25th, and in compliance with the request of the Executive Committee of the Managers of the Exhibition and Fair of the Massachusetts Charitable Mechanic Association, I have the honor to submit to you, for publication, my address of the 20th instant. It is scarcely necessary to observe, that it is by no means to be considered as a philosophical treatise, exhausting the subject, and worthy the notice of the student, but as a series of reflections and illustrations, of a somewhat desultory character, designed for delivery before a popular audience, and hastily thrown together amidst numerous pressing avocations.

I am, gentlemen, with high respect,

Your friend and servant,

EDWARD EVERETT.

Messrs. STEPHEN FAIRBANKS,

JAMES L. HOMER,

JAMES CLARK.

A D D R E S S .

MR. PRESIDENT AND GENTLEMEN,

I beg leave to congratulate you on the success of your efforts to establish the first fair of the Massachusetts Charitable Mechanic Association. Under circumstances somewhat unfavorable, you have produced an exhibition which, I am persuaded, has fully answered the public expectation. More than fifteen thousand articles, in almost every department of art, have been displayed in the halls. Specimens of machinery and fabrics, reflecting great credit on their inventors, improvers, and manufacturers, many of them affording promise of the highest utility, and unitedly bearing a very satisfactory testimony to the state of the arts in this country, and particularly in this community, have been submitted to the public inspection. The exhibitors have already, in the aggregate, been rewarded with the general approbation of the crowds of our fellow-citizens, who have witnessed the display. It will be the business of your committees, after a critical examination of the articles exhibited, to award enduring testimonials of merit. But the best reward will be the consciousness of having contributed to the common stock of the public welfare, by the successful cultivation of the arts so important to the improvement of society and the happiness of life.

I feel gratified at being invited to act as the organ of your Association, in this general expression of its sentiments, on so

interesting an occasion. It would be a pleasing employment to attempt an enumeration and description of some of the most important of the articles exhibited. But it would be impossible to accomplish this object, to any valuable purpose, within reasonable limits. It would require a condensing apparatus more efficient than any which has yet been contrived, to bring even a descriptive catalogue of the articles exhibited, within the compass of a public address ;—to give a full account of the most important of them, would demand no small portion of the knowledge and skill required for their fabrication. The nature of this occasion prescribes a much simpler character to the remarks I shall submit to your indulgence. It will be my sole object to establish, by a few obvious illustrations, the vast importance of the Mechanic Arts. In pursuing this end, the greatest difficulty to be overcome is, that the point to be established is too certain to be proved, and too generally admitted to need a formal assertion.

Man, as a rational being, is endowed by his Creator with two great prerogatives. One is the control over matter and inferior animals, which is physical power ;—the other the control over kindred mind, which is moral power ; and which, in its lower forms, is often produced by the control over matter : so that power over the material world is, practically speaking, a most important element of power in the social, intellectual, and moral world. Mind, all the time, is the great mover ; but surrounded,—encased,—as it is with matter, acting by material organs, treading a material earth, incorporated and mingled up with matter,—I do not know that there is any thing but pure, inward thought, which is not dependent upon it ; and even the capacity of the mind for pure thought is essentially affected by the condition of the material body, and by external circumstances acting upon it.

This control of mind over matter is principally effected through the medium of the mechanic arts, taking that term in its widest acceptation. The natural faculties of the human frame, unaided by artificial means, are certainly great and wonderful ; but they sink to

nothing compared with the power which accrues from the skilful use of tools, machines, engines, and other material agents. Man, with his unaided strength, can lift but one or two hundred weight, and that but for a moment ; with his pulleys and windlasses, he sets an obelisk upon its base, — a shaft of solid granite a hundred feet high. The dome of St. Peter's is one hundred and twenty feet in diameter ; its sides are twenty-two feet in thickness, and it is suspended in the air at an elevation of three hundred and twenty feet from the ground, — and it was raised by hands as feeble as these. The unaided force of the muscles of the human hand is insufficient to break a fragment of marble, of any size, in pieces ; but, on a recent visit to the beautiful quarries in Sheffield, from which the columns of the Girard College at Philadelphia are taken, I saw masses of hundreds of tons, which had been cleft from the quarry by a very simple artificial process. Three miles an hour, for any considerable space of time, and with ample intervals for recreation, food, and sleep, are the extreme limit of the locomotive capacity of the strongest frame, and this confined to the land. The ARTS step in : by the application of one portion of them to the purposes of navigation, man is wafted, night and day, alike waking and sleeping, at the rate of eight or ten miles an hour, over the unfathomed ocean ; and, by the combination of another portion of the arts, he flies at the rate of fifteen or twenty miles an hour, and if need be with twice that rapidity, without moving a muscle, from city to city. The capacity of imparting thought, by intelligible signs, to the minds of other men, — the capacity which lies at the foundation of all our social improvements, — while unaided by art, was confined within the limits of oral communication and memory. The voice of wisdom perished, not merely with the sage by whom it was uttered, but with the very breath of air on which it was borne. ART came to the aid of the natural capacity ; and, after a long series of successive improvements, passing through the stages of pictorial and symbolical representations of things, — the different steps of hieroglyphical writing, (each occupying, no doubt, long periods of time for its

discovery and application,) — it devised a method of imprinting on a material substance an intelligible sign, not of things, but of sounds forming the names of things; — in other words, it invented the A B C. With this simple invention, and the mechanical contrivances with which it is carried into effect, the mind of man was, I had almost said, re-created. The day before it was invented, the voice of man, in its utmost stretch, could be heard but by a few thousands, intently listening for an hour or two, during which alone his strength would enable him to utter a succession of sounds. The day after the art of writing was invented, he stamps his thoughts on a roll of parchment, and they reach every city and hamlet of the largest empire. The day before this invention, and the mind of one country was estranged from the mind of all other countries. For almost all the purposes of intercourse, the families of man might as well not have belonged to one race. The day after it, and Wisdom was endued with the gift of tongues, and spake by her interpreters to all the tribes of kindred men. The day before this invention, and nothing but a fading tradition, constantly becoming fainter, could be preserved by the memory, of all that was spoken or acted by the greatest and wisest of men. The day after it, Thought was imperishable; it sprung to an earthly immortality; it seized the new-found instruments of record and commemoration, and, deserting the body as it sunk with its vocal organs into the dust, it carved on the very grave-stone, “The mind of man shall live forever.”

It would be easy to multiply these illustrations of the importance of the aid rendered by the arts to the natural faculties of man. They present themselves to the reflecting mind in every direction; and they lead the way to the conclusion, that the mechanical arts are the great instruments of human civilization. We have some means of judging what man was before any of the useful arts were discovered, because there exist on the surface of the globe many tribes and races nearly or quite destitute of them; as, for instance, the native inhabitants of this continent. We know

not with certainty, it is true, whether these and other savage races are specimens of humanity, disjoined from the parent stock, before great progress had been made in civilization, or broken down and degenerate fragments of nations once cultivated, and retaining, even in their present degraded condition, some remnants of primitive improvement. There are some circumstances which favor the latter opinion, and consequently they do not afford us a perfect specimen of what man would be, before the discovery of any of the useful arts of life. But we may see enough in them to learn how much of all our civilization resides in these arts ; that, in fact, civilization may almost be considered another word for their aggregate existence and application. For it is a somewhat humiliating reflection, that, in many things dependent on the human organs and senses,—unaided by the arts,—the savage greatly excels the most improved civilized man. Thus man, with one set of glasses, penetrates the secret organization of the minutest insect or plant,—marks the rise of the sap in the capillaries of a blade of grass, counts the pulsations of the heart in an animalcule a hundred times smaller than the head of a pin ; while, with another set of glasses, he fills the heavens with a hundred millions of stars, invisible to the naked eye. To the savage, the wonders of the microscope and the telescope are unknown ; but he can, by traces which elude our keenest vision, tell whether it is the foot of friend or enemy which has passed over the grass before his tent in the silence of night ; and he can find his way through the pathless and tangled forest without a guide. Civilized man, with his wheels and his steam, runs a race with the winds, but, left to the natural force of his members, soon sinks from fatigue. The indefatigable savage, ignorant of artificial conveyance, outtires, on foot, the hound and the horse ; and, while the famished child of civilized life faints at the delay of his periodical meal, a three days' hunger makes no impression on the iron frame of the poor Indian. Civilized man, although surrounded by his arts, with enjoyments that seem to render life a hundred fold more precious, lies drenched in sleep

one third of his precious hours, and may well envy the physical training which enables his hardy brother of the forest, when occasion requires, to bid defiance, night after night, to the approach of weariness.

But this superiority which the savage possesses over civilized man, in the discipline of some of the natural capacities of our frame, is turned to little account of human improvement and happiness, for want of those arts which create, combine, and perpetuate the powers and agents by which our wants are supplied. — Even the few comforts of which his forlorn condition is susceptible are mostly derived, not from this superior training of his natural faculties and senses, but from his possession of some few imperfect arts. The savage needy at best, without his moccasins, his snow-shoes, his dressed buffalo skin, his hollowed tree or bark canoe, his bow and arrow, his tent and his fishing gear, would be a much more abject being. And these simple inventions, and the tools and skill required by them, no doubt occupied a considerable period in the early history of our race. But the great difference between savage and civilized life consists in the want of those more improved arts,—the products of which we have been contemplating,—by which no inconsiderable quantity of human power and skill can be transferred to inanimate tools and machinery, and perpetuated in them ;—the arts whereby the grasp of the hand, which soon wearies, can be transferred to the iron gripe of the vice, the clamp, the bolt, that never tire ; the arts by which stone, and metal, and leather, and wood, may be made to perform the offices of poor flesh and bone. The savage, when he has parched his corn, puts it in a rude mortar, which with infinite toil he has scooped out of a rock, and laboriously pounds it into meal. It is much, if, in this way, he can prepare food enough to keep him alive while he is preparing it. The civilized man, when he has raised his corn, builds a mill with a water-wheel, and sets the indefatigable stream to grinding his grain. There are now two or three laborers at work ;—one, it is true, with forces which soon weary, and which

can only be kept up by consuming a part of the corn as fast as it can be made into food, but endowed with an untiring and inexhaustible invention ;—the other patient fellow-laborers of wood and iron, the stream, the wheel, and the mill-stone, without capacity for head-work, are willing to grind corn all day, and not ask a mouthful back by way of sustenance.—Civilization is kept up by storing the products of the labor thus economized, and imparting a share of it to those engaged in some other pursuit, who give a portion of its products in exchange for food.

Take another illustration in the arts employed in furnishing the clothing of man. The savage, when he has killed a buffalo and dried his skin, prepares it with the manual labor of several weeks for a garment ;—a substantial and sightly garment ; but it has taken him a long time, and he has made but one. The civilized man, having a world of business on his hands, has contrived a variety of machines, which perform almost all the work required for his clothing. He cuts a mass of curled wool from the sheep's back,—a confused, irregular heap of fibrous threads, which would seem to defy the skill and industry of the artificer. How long will it not take the busiest pair of fingers to piece those fibres together, end to end, to lay them side by side, so as to give them substance, coherence, dimensions,—to convert them into a covering and defence, excluding cold and wet ! The savage, in taking the skin, seems to have made the wiser choice. Nature has done the spinning and weaving to his hand.—But wait a moment :—there is a group of iron-fingered artificers in yonder mill will show you a wonder. They will, with a rapidity scarcely conceivable, convert this uncouth fibrous heap into a uniform mass ; they will draw out its short, curly fibres into long, even threads,—lay them side by side, and curiously cross them over and under with magical dexterity, till they form a compact tissue,—covered with a soft down and a glossy lustre,—smooth, impervious, flexible,—in quantity sufficient to clothe a family for a year, with less expense of human labor, than would be required to dress a single skin.

Consider the steam engine. It is computed that the steam power of Great Britain, not including the labor economized by the enginery it puts in motion, performs annually the work of a million of men. In other words, the steam engine adds to the human population of Great Britain another population, one million strong. Strong it may well be called. What a population! so curiously organized, that they need neither luxuries nor comforts,—that they have neither vices nor sorrows,—subject to an absolute control without despotism,—laboring night and day for their owners, without the crimes and woes of slavery; a frugal population, that wastes nothing and consumes nothing unproductively; an orderly population, to which mobs and riots are unknown; among which the peace is kept without police, courts, prisons, or bayonets; and annually lavishing the product of one million pairs of hands, to increase the comforts of the fifteen or twenty millions of the human population.—And yet the steam engine, which makes this mighty addition to the resources of civilization, is but a piece of machinery. You have all seen it, both in miniature and on a working scale, at the halls. In the miniature model, (constructed by Mr. Newcomb of Salem,) it can be moved by the breath of the most delicate pair of lips in this assembly; and it could easily be constructed of a size and power, which would rend these walls from their foundation, and pile the roof in ruins upon us. And yet it is but a machine. There is a cylinder and a piston; there are tubes, valves, and pumps,—water, and a vessel to boil it in. This is the whole of that enginery, with which the skill and industry of the present age are working their wonders. This is the whole of the agency which has endowed modern art with its superhuman capacities, and sent it out to traverse the continent and the ocean, with those capacities which Romance has attributed to her unearthly beings:—

Tramp, tramp, along the land they ride,
Splash, splash, across the sea.

It is wholly impossible to calculate the quantity of labor economized by all the machinery which the steam engine puts in motion. Mr. Baines* states, that the spinning machinery of Great Britain, tended by one hundred and fifty thousand workmen, "produces as much yarn as could have been produced by FORTY MILLIONS OF MEN with the one-thread wheel!" Dr. Buckland remarks, that it has been supposed that "the amount of work now done by machinery in England is equivalent to that of between three and four hundred millions of men by direct labor."†

This prodigious economy and accumulation of power, effected by the mechanic arts, are occupied in supplying the wants and promoting the comfort of man. When, therefore, the ingenious artisan makes an improvement in a useful machine, he economizes labor, creates power, accumulates usefulness, and promotes the progress of civilization. I doubt not, if it were possible to write the secret history of the mechanic arts, (if I may so express myself,) — to trace the most important manufactures and machines through their various stages to their origin, — to show how, by the addition of a spring here, a cog there, a knee-joint in this place, a perpetual screw in that, or a system of these powers, the most complicated engines have been brought from the humblest beginnings to their present condition, — it would appear that a single mechanical improvement had often had the effect of adding thousands and tens of thousands of horse power and man power to the productive energy of the community. The astonishment and admiration with which we should survey the wonders of modern machinery, are impaired by not knowing, more generally than the mass of men can know, the stages through which it has passed, and the mental efforts which have been expended in improving it. There is an untold, probably an unimagined amount of human talent, — of high mental power, — locked up among the wheels and springs of the machinist; a force of intellect of the loftiest character has been required to make this

* Baines's *History of the Cotton Manufacture*, p. 362.

† Buckland's *Geology and Mineralogy*, Vol. I. p. 400.

department of human pursuit what it is. This stunning din, this monotonous rattle, this tremendous power, and the quiet, steady force of these humble, useful, familiar arts, result from efforts of the mind, kindred with those which have charmed or instructed the world with the richest strains of poetry, eloquence, and philosophy.

These improvements have sometimes been long delayed, and art, for ages, has been stationary ; and then, by the happy development of some mechanical contrivance, it has made boundless progress in an age. It is not yet, I believe, more than two or three centuries, since the only mode of spinning known was by the rock and spindle. The simple spinning-wheel, moved by the hand, and which was thought, in the times of our grand-parents, to show a graceful form and a well-turned arm to nearly as much advantage as a harp at the present day, and to make a music almost as cheerful, is at once an obsolete and a modern invention. The Greeks and Romans are said to have been unacquainted with the spinning-wheel. The monarch's heavy purple and the nymph's airy tissue were alike manufactured by twirling the distaff, and drawing out a thread with the fingers ; — and no improvement was made on this tedious process, in Great Britain, before the fifteenth century. It is evident that much more labor must have been requisite, with this rude machinery, to supply the indispensable article of clothing, than with the modern improvements. The introduction of the spinning-wheel produced a great economy of this labor ; but the introduction of the spinning and weaving machinery of the last century, has pushed this economy to an extent, at which it is in vain to attempt to calculate it. This economy operates, first, to multiply the comforts of the existing population, and then, by necessary consequence, to increase the population capable of subsisting in a given circuit. Yes, the man who, in the infancy of the arts, invented the saw or the plane, the grindstone, the vice, or the hand-mill ; and those who, in later periods, have contributed to the wonderful system of modern machinery, are entitled to rank high among the benefactors of mankind, — the fathers of civilization, — the creators, I had almost said, of nations. No, it is not the

fabulous wand of the enchanter, it is the weaver's beam, and instruments like it, which call thousands and tens of thousands into being. Mind, acting through the useful arts, is the vital principle of modern civilized society. The mechanician, not the magician, is now the master of life. He kindles the fires of his steam engine, — the rivers, the lakes, the ocean, are covered with flying vessels; mighty chain-pumps descend, clanking and groaning, to the deepest abysses of the coal mine, and rid them of their deluging waters; and spindles and looms ply their task as if instinct with life. It is the necromancy of the creative machinist. In a moment a happy thought crosses his imagination, — an improvement is conceived. Some tedious process can be superseded by a chemical application, as in the modern art of bleaching. — Some necessary result can be attained, in half the time, by a new mechanical contrivance; — another wheel — a ratchet — a screw will effect the object; he tries a few experiments; it will succeed; it is done. He stamps his foot, and a hundred thousand men start into being; not, like those which sprang from the fabled dragon's teeth, armed with the weapons of destruction, but furnished with every implement for the service and comfort of man. It is stated by James Watt, (before whose time the steam engine was an imperfect and inefficient machine,) that the moment the notion of "separate condensation" struck him, all the other details of his improved engine followed in rapid and immediate succession, so that, in the course of a day, his invention was so complete that he proceeded to submit it to experiment.* Could that day be identified, it would well deserve an anniversary celebration by the universal tribes of civilized man.

I have said that mind, acting through the mechanic arts, is the vital principle of modern civilized society. I would be the last to undervalue the importance of moral and intellectual influences, or to

* Lardner's Popular Lectures on the Steam Engine, p. 61. Dr. Lardner, in the context of the passage above quoted, speaks of the notion of "separate condensation" as the "happy conception which formed the first step of that brilliant career which has immortalized the name of Watt, and which has spread his fame to the very skirts of civilization."

seem to give undeserved countenance to the mechanical tendency of the age. On the contrary, I look upon the intellectual and moral influence of the useful arts, as the most important aspect, in which the subject can be contemplated. The immediate result of every improvement in these arts, as has been already stated, often is, and always might and should be, by making less labor and time necessary for the supply of human wants, to raise the standard of comfortable living, — increase the quantity of leisure time applicable to the culture of the mind, — and thus promote the intellectual and moral progress of the mass of the community. That this is the general tendency of a progress in the useful arts, no one can doubt, who compares the present condition of the world with its condition in the middle ages ; and the fact is confirmed by the history of single inventions. I have already spoken of alphabetical writing. Pliny remarks of the Egyptian reed, (the first material of which paper was made,) that on this reed rested the immortality of man. The thought, though savoring of heathenism in the expression, is just. This single art of alphabetical writing was a step absolutely essential in the moral and intellectual progress of our race. To speak of the art of printing, in its connection with morals and mind, would be as superfluous as it would be difficult to do justice to the topic. Its history is not so much an incident as the summary of modern civilization. — Vast as the influence of this art of arts has been, it may well be doubted whether improvements will not yet be made, in the mechanism connected with it, which will incalculably increase its efficiency. If I mistake not, the trumpet-voice of Truth from this machine is yet destined to reach to distances and depths of society, which have hitherto remained unexplored and neglected.

Again, in reference to the intimate connection of the useful and mechanic arts with intellectual progress, let us but advert for a moment to the mariner's compass, the telescope, the quadrant. For myself, I never reflect upon their influence on the affairs of man, and remember that they are, after all, merely mechanical contrivances, without emotions of admiration bordering upon awe. This sentiment, I

know, is so worn away by habit, that it seems almost to run into sentimentality. But let us not be ashamed to reproduce the emotions that spring from the freshness of truth and nature. What must not have been Galileo's feelings when he pointed the first telescope to the heavens, and discovered the phases of Venus and the moons of Jupiter! When I behold the touched needle trembling to the pole,—when I know that, beneath the utter blackness of the midnight storm, when every star in heaven is quenched, and the laboring vessel, in mid-ocean, reels like a drunken man on the crested top of the mighty waves, that little bar of steel will guide the worn and staggering helmsman on his way,—I feel that there is a holy philosophy in the arts of life, which, if I cannot comprehend, I can reverence.

Consider the influence on the affairs of men, in all their relations, of the invention of the little machine which I hold in my hands; and the other modern instruments for the measurement of time, various specimens of which are on exhibition in the halls. To say nothing of the importance of an accurate measurement of time in astronomical observations,—nothing of the application of time-keepers to the purposes of navigation,—how vast must be the aggregate effect on the affairs of life, throughout the civilized world, and in the progress of ages, of a convenient and portable apparatus for measuring the lapse of time!—Who can calculate in how many of those critical junctures when affairs of weightiest import hang upon the issue of an hour, Prudence and Forecast have triumphed over blind Casualty, by being enabled to measure with precision the flight of time, in its smallest subdivisions! Is it not something more than mere mechanism, which watches with us by the sick-bed of some dear friend, through the livelong solitude of night, enables us to count, in the slackening pulse, nature's trembling steps toward recovery, and to administer the prescribed remedy at the precise, perhaps the critical, moment of its application? By means of a watch, punctuality in all his duties,—which, in its perfection, is one of the incommunicable attributes of Deity,—is brought, in no mean measure, within the reach of man. He is enabled, if he will be guided

by this half-rational machine, creature of a' day as he is, to imitate that sublime precision which leads the earth, after a circuit of five hundred millions of miles, back to the solstice at the appointed moment, without the loss of one second, no, not the millionth part of a second, for the ages on ages during which it has travelled that empyreal road.* What a miracle of art, that a man can teach a few brass wheels, and a little piece of elastic steel, to out-calculate himself; to give him a rational answer to one of the most important questions which a being travelling toward eternity can ask! What a miracle, that a man can put within this little machine a spirit † that measures the flight of time with greater accuracy than the unassisted intellect of the profoundest philosopher; which watches and moves when sleep palsies alike the hand of the maker and the mind of the contriver, nay, when the last sleep has come over them both! I saw the other day, at Stockbridge, the watch which was worn on the 8th of September, 1755, by the unfortunate Baron Dieskau, who received his mortal wound on that day, near Lake George, at the head of his army of French and Indians, on the breaking out of the seven years' war. This watch, which marked the fierce, feverish moments of the battle as calmly as it has done the fourscore years which have since elapsed, is still going; but the watch-maker and baron have now for more than three fourths of a century been gone where time is no longer counted. Frederic the Great was another and a vastly more important personage of the same war. His watch was carried away from Potsdam by Napoleon, who, on his rock in mid-ocean, was wont to ponder on the hours of alternate disaster and triumph, which filled up the life of his great fellow-destroyer, and had been equally counted on its dial-plate. The courtiers used to say, that this watch stopped of its own accord, when Frederic died. Short-sighted

* It is not, of course, intended that the sidereal year is always of precisely the same length, but that its variations are subject to a fixed law. See *Sir John Herschel's treatise on Astronomy*, § 563.

† *Inclusus variis famulatus spiritus astris*

Et vivum certis motibus urget opus.

Claudian. in Sphær. Archimedis.

adulation ! for if it stopped at his death, as if time was no longer worth measuring, it was soon put in motion, and went on, as if nothing had happened. Portable watches were probably introduced into England in the time of Shakspeare ; and he puts one into the hand of his fantastic jester, as the text of his morality. In truth, if we wished to borrow from the arts a solemn monition of the vanity of human things, the clock might well give it to us. How often does it not occur to the traveller in Europe, as he hears the hour told from some ancient steeple,—that iron tongue in the tower of yonder old cathedral, unchanged itself, has had a voice for every change in the fortune of nations ! It has chimed monarchs to their thrones, and knelled them to their tombs ; and, from its watch-tower in the clouds, has, with the same sonorous and impartial stoicism, measured out their little hour of sorrow and gladness to coronation and funeral, abdication and accession, revolution and restoration ; victory, tumult, and fire : *—and, with like faithfulness, while I speak, the little monitor by my side warns me back from my digression, and bids me beware lest I devote too much of my brief hour, even to its own commendation.

Let me follow the silent monition, sustained, perhaps, by the impatience of the audience, and hasten to the last topic of my address. The object of our present exhibition is not mere show, however innocent and gratifying. It is to make the community better acquainted with the state of the arts, by a public display of their products ; to excite a generous emulation, by their comparison : and thus to lead on our ingenious artificers, improvers, and inventors, to higher degrees of excellence. The astonishing progress of the arts, in modern times, is a subject of the most familiar remark. It would require a volume even to enumerate the most considerable improvements. So numerous are the inventions and discoveries that have been made in every department, and to such perfection have

* The associations here alluded to have lately been rendered familiar to the public by the Mayor's spirited translation and adaptation to music of Schiller's splendid poem of *The Bell*. The idea was originally glanced at in one of Mrs. Elizabeth Montague's Letters.

many arts been carried, that we may, perhaps, be inclined to think that, in the arts, as on the surface of the globe after all the brilliant discoveries in navigation in the last three centuries, there is nothing left to find out. Though it is probable that, in particular things, no further progress can be made, (and even this I would not affirm, with any confidence,) yet, so far from considering invention as exhausted, or art at a stand, I believe there never was a moment when greater improvements were to be expected: and this for the very reason that so much has already been done,—that truth, in its nature, is at once boundless and creative,—and that every existing art, invention, and discovery, is but an instrument of further improvement.—Even when any particular art or machine seems to have reached the highest attainable point of excellence, nothing is more likely than that it will, by some wholly unexpected discovery or improvement, be greatly advanced; or that, by accidental or natural association, it will lead to some other very important improvement in a branch of art wholly dissimilar; or, finally, that it will be superseded by something quite different, but producing the same result.—Take, as an example, the art of printing.—The simple process of printing with movable types and a press moved by hand, does not seem, in the lapse of four hundred years, to have undergone any very material improvement;—but the introduction of solid plates, and the application of artificial power to the press, are improvements wholly disconnected, in their nature, from the art of printing, and yet adding incalculably to its efficacy and operative power.—In a word, the products of art are the creations of rational mind, working with intelligent and diversified energy, in a thousand directions;—bounding from the material to the moral world, and back from speculation to life; producing the most wonderful effects on moral and social relations by material means, and again, in an improved political and moral condition, finding instruments and encouragement for new improvements in mechanical art.—In this mighty action and reaction, we are continually borne on to results the most surprising. Physical and moral causes and effects produce moral and physical effects and causes, and every

thing discovered tends to the discovery of something yet unknown. It rarely, perhaps never, happens that any discovery or invention is wholly original;—as rarely, that it is final. As some portion of its elements lay in previously existing ideas, so it will waken new conceptions in the inventive mind. The most novel mechanical contrivance contains within itself much that was known before; and the most seemingly perfect invention—if we may judge the future by the past—admits of further improvements. For this reason, the more that is known, discovered, and contrived, the ampler the materials out of which new discoveries, inventions, and improvements, may be expected.

Perfect as the steam engine seems, it is a general persuasion that we are in the rudiments of its economical uses. The prodigious advances made in the arts of locomotion teach nothing more clearly than the probability, that they will be rendered vastly more efficient. The circulation of ideas by means of the press is probably destined to undergo great enlargement. Analytical chemistry has, within the last thirty years, acquired instruments which enable the philosopher to unlock mysteries of nature before unconceived of. Machinery of all kinds, and for every purpose, is daily simplified and rendered more efficient. Improved manipulations are introduced into all the arts, and each and all of these changes operate as efficient creative causes of further invention and discovery.—Besides all that may be hoped for by the diligent and ingenious use of the materials for improvement afforded by the present state of the arts, the progress of science teaches us to believe that principles, elements, and powers, are in existence and operation around us, of which we have a very imperfect knowledge, perhaps no knowledge whatever. Commencing with the mariner's compass in the middle ages, a series of discoveries has been made connected with magnetism, electricity, galvanism, the polarity of light, and the electro-magnetic phenomena which are occupying so much attention at the present day, all of which are more or less applicable to the useful arts, and which may well produce the

conviction that, if in some respects we are at the meridian, we are in other respects in the dawn of science. In short, all art, as I have said, is a creation of the mind of man;—an essence of infinite capacity for improvement. And it is of the nature of every intelligence endowed with *such* a capacity, however mature in respect to the past, to be at all times, in respect to the future, in a state of hopeful infancy. However vast the space measured behind, the space before is immeasurable; and though the mind may estimate the progress it has made, the boldest stretch of its powers is inadequate to measure the progress of which it is capable.

Let me say, then, Mr. President, and Gentlemen of the Mechanic Association, **PERSEVERE**. Do any ask what you have done, and what you are doing for the public good; send them to your exhibition rooms, and let them see the walls of the temple of American Liberty fitly covered with the products of American Art. And while they gaze with admiration on these creations of the mechanical arts of the country, bid them remember that they are the productions of a people whose fathers were told by the British ministry they should not manufacture a hob-nail! Does any one ask in disdain for the great names which have illustrated the Mechanic Arts; tell him of Arkwright and Watt, of Franklin, of Whitney, and Fulton, whose memory will dwell in the grateful recollections of posterity, when the titled and laureled destroyers of mankind shall be remembered only with detestation.—Mechanics of America, respect your calling, respect yourselves. The cause of human improvement has no firmer or more powerful friends. In the great Temple of Nature, whose foundation is the earth,—whose pillars are the eternal hills,—whose roof is the star-lit sky,—whose organ-tones are the whispering breeze and the sounding storm,—whose architect is God,—there is no ministry more sacred than that of the intelligent mechanic!

ORDER OF EXERCISES

AT THE ODEON, SEPTEMBER 20, 1837,

ON OCCASION OF THE

FIRST FAIR AND EXHIBITION

OF THE

Massachusetts Charitable Merchant Association.

PART I.—ANTHEM.

LET us, with a joyful mind,
Praise the Lord, for he is kind;
For his mercies shall endure,
Ever faithful, ever sure.
Hallelujah! Amen.

PART II.—PRAYER, BY REV. MR. BLAGDEN.

PART III.—HYMN, BY REV. MR. PIERPONT. Tune—*America.*

Not with a conqueror's song
Thy courts, O God, we throng,
For battles gained;
No cannon's sulphurous throat,
No trumpet gives its note,
No banners o'er us float,
With fresh blood stained.

Over no captive kings
Our eagle spreads her wings,
Or whets her beak;
Nor, o'er the battle plain,
Where death-shot fell like rain,
Where lie in gore the slain,
Comes her shrill shriek.

For ART, which thou hast given,
The tribute, due to Heaven,
We come to pay;
ART, that, to deck her halls,
On air and vapor calls,
On winds and waterfalls,
And all obey;—

ART, that, from shore to shore,
Moves, without sail or oar,
'Gainst winds and tides;
Or, high o'er earth and seas,
Sits in her car at ease,
And, heavenward, on the breeze,
Triumphant rides;—

ART, that, through mountain bars,
Breaks, that her horseless cars,
Self-moved, may go ;
And, without looking back,
Rolls, on her iron track,
Where the white cataract
Thunders below ;—

ART, that, on spool or reel,
Winds the smooth silk or steel,
Spun by her hand ;
Then, with her touch of fire,
Draws, from the chord or wire,
Tones that an angel choir
Well might demand ;—

ART, that, to thee, MOST HIGH,
Gladly doth sanctify
Her works and powers :
Lord, ere our tongues are still,
Our hands forget their skill,
To thy most holy will
Devote we ours.

PART IV.—ADDRESS,
BY HIS EXCELLENCY EDWARD EVERETT.

PART V.—HYMN,
BY THOMAS POWER, ESQ.

Tune—Old Hundred.

To thee, O God, our song of praise,
With heart and voice, we humbly raise ;
Thy goodness, traced each coming day,
Demands the grateful vows we pay.

As low we bend before thy throne,
As thy great mercy still we own,
Be each desire and hope, subdued,
In love, to thee and man, renewed.

Our fathers owned the Almighty arm,
Ere Art had borne its fairer form :
For higher blessings we have known,
Our thanks are due to thee alone.

While heavenly choirs unceasing swell
A loftier strain than man can tell,
Our latest care, O God, shall be
To bring a tribute worthy thee.

Soon shall each pulse of life be still,
And pride of Art, and human skill :
Then raise the trusting soul in love,
To learn its highest theme above !

To thee, O God, our song of praise,
With heart and voice, we humbly raise :
All creatures join, in love, again,
While skies roll back a loud amen.

PART VI.—BENEDICTION,
BY REV. MR. RIPLEY.

VOLUNTARY ON THE ORGAN,
BY DR. WEBB.





4

MR. AUSTIN'S ADDRESS

DELIVERED BEFORE THE

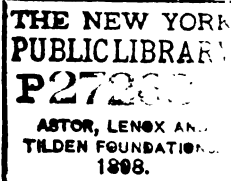
MASSACHUSETTS

Charitable Mechanic Association,

OCTOBER 3, 1839.

☆ MASS. HIST. SOC.





AN
ADDRESS,

DELIVERED BEFORE THE

MASSACHUSETTS

Charitable Mechanic Association,

AT THE CELEBRATION OF THEIR,

ELEVENTH TRIENNIAL FESTIVAL,

AND

SECOND EXHIBITION AND FAIR,

OCTOBER 3, 1839.

BY JAMES TRECOTHICK AUSTIN,

HONORARY MEMBER OF THE ASSOCIATION.

Boston,

PRINTED BY ISAAC R. BUTTS,
FOR THE ASSOCIATION.

1839.

Boston, *October 5, 1839.*

DEAR SIR,

The undersigned, in behalf of the Government of the Massachusetts Charitable Mechanic Association, have been directed to communicate to you the thanks of said Association, for your eloquent and very appropriate Address delivered before them on the 3d instant, and request a copy for the press.

We are, Sir,

Very respectfully,

Yours, &c.

GEORGE DARRACOTT,
JOSEPH LEWIS,
URIEL CROCKER.

HON, JAMES T. AUSTIN,

TREMONT STREET, *7th October, 1839.*

GENTLEMEN,

The Address, which by your favor I had the honor to deliver, is at your request submitted to your disposal.

With great respect,

JAMES T. AUSTIN.

GEORGE DARRACOTT,
JOSEPH LEWIS,
URIEL CROCKER, Esqrs.

ADDRESS.

SOCIETY, in the progress of civilization, is broken into classes of men of more or less relative influence; and these classes are composed of individuals, no two of whom bear the same exact relation to the whole community.

The sublime conception of the natural equality of man, consecrated by philanthropy and freedom, and itself the sustaining pillar of both, does not indicate an actual or even possible uniformity in the condition of life.*

There is no equality in the faculties of men; no equality in corporeal strength; no equality in genius, talents or intellectual powers of any kind. The moral principle runs through every degree of sensibility, till it sinks to the point of perpetual congelation. Education, disposition, health, opportunity, conduct and consequently character, the great artificer of human fortune, or at any rate of human happiness, are displayed in every possible variety. On the race-course of human life there is difference in the start and the speed, and of course at every point on the field. What is called

* The same statesmen who declared in the Constitution of Massachusetts, that all men are born free and equal, provided that only those should have the right of voting, or of being elected, who possessed a certain amount of property.

accident, because it is difficult to find a cause, or trace its operation, determines to a great degree the position of the individual or its consequences. A power unseen and inscrutable regulates the unaccountable vicissitude, as if to demonstrate, that in the social as in the natural world,

“ All nature’s difference keeps all nature’s peace.”

Such are the elements of the social system in every association of men, in every period of human history.

What are its objects? Wealth, honors, fame cannot be equally distributed. Their very character depends on their comparative exclusiveness. What to any man would be the value of property, if all men were equally rich? Nothing. Poverty and wealth are but comparative terms; and an exact equality of condition in the whole society, — if it were possible for a moment to conceive of it, — would confound the business of life. No man could sell, no man could buy, no man would labor. Industry would be without a motive, and exertion without reward. Multiply this wealth as you please; let it be gathered upon the sea-shore, as if every beach was the sand of Pactolus; there would be but one blank and sterile waste in an uncultivated world; and the glittering grief of actual poverty in its caverns of gold.

What are the honors of life? If they mean any thing, they mean that he who wears them is better than his neighbor. They are the tributes of the world’s respect to the world’s benefactors; acknowledgments of the existence and the exertion of some superior faculty or power of body or of mind.

Fame, that prolongs life even in this world beyond the confines of the grave; existence in the admiration of mankind; life in other’s breath; the desire of it, the noble mind’s distinguishing perfection, the inspirer of great thoughts, of gallant actions, patriot sacrifice, devoted philanthropy; what is it but that tribute of

esteem, regard, admiration from their fellow-men, which places Franklin, Arkwright, Watt, Fulton, and their kindred spirits, on an elevation above the rest of the world. Distinction is the prize of life, and courted only because in its great lottery there are so many blanks. But in all games of chance or skill, if one wins another loses. Success cannot be universal, and some must be disappointed. Disappointment begets envy; and envy complaint. There is no such dissatisfaction in the distribution of the common benefactions of Providence. There is never any complaint that a man breathes too much air or drinks in too much light. When blessings are to be had for the asking, the possession of them creates no jealousy. It is individual exertion and the consequences of it, that seem to make distinctions in life personal affairs, and to cause on one side an unhal- lowed pride, offensive and contemptible, and on the other an unreasonable hostility, equally criminal. Neither exertion nor the success of it, should generate these feelings.

By a law of human nature, which, like gravitation in the natural world, keeps society in its determinate order, motives are held out for individual effort, and peculiar benefits are promised to successful competitors. The operation of these motives, and the fulfilment of these promises produce that inequality of outward condition, which is inseparable from the formation of civilized society. If a seeming chance has any thing to do with the result, the circumstances are more complicated and inexplicable. To change this order of nature, to alter the diversified condition of human life; to bring its hills and valleys into one uniform plane, by levelling upward or downward; or to irradiate its whole surface with the same sun-light of fortune, is a task as gigantic, and probably as useless, as to equalize the temperature of the zones, or reform the geological structure of the globe.

It is impossible not to perceive in that arrangement which throws mankind into distinct classes, the same beauty of design which marks every operation of the Supreme Intelligence. We trace the

products of the natural world from the humble spire of grass, to bush, vine or tree in all the magnificence of its foliage; from the lowly flower, that "wastes its sweetness on the desert air," to the golden fruit that hangs in the gardens of our modern Hesperides. All unite in one voice of harmony and praise. All contribute to the perfection of the great whole. It is the same in the world of human life. Classes exist in society also. Each class has its own part to perform in the general concert. The profound researches of the Philosopher, the comprehensive policy of the Statesman, the illimitable enterprise of the Merchant, the contributions of professional men to health, order, and religion, are concerted parts of one grand harmony; while the great majority of our fellow-beings, the immense mass of men in one mighty association of intelligent Labor, resemble the

"Great ocean, strongest of creation's sons;
Unconquerable, unreposed, untired,
That rolls the deep, profound, **ETERNAL BASS**
OF NATURE'S ANTHEM, and makes music, such
As pleased the ear of God."

Distinctions arising from a natural order of things, or from the acquired character of individuals in a state of society, where the general good forms the leading object of all political arrangement, are not subjects of complaint. They enter intimately into that order, by which "one star differeth from another star in glory." What should be done, and all that can be done, is to preserve the relations of individuals in society from those artificial contrivances, which in all ages of the world, with too much success, have set up false standards of honor, distinction and glory; have sacrificed the many to the few; have retarded individual progress and repressed exertion; have subjected industry and virtue to the influence of family and fortune; and broken the elastic spirit of freedom by the imposition of unjustifiable power.

Such imposition has extensively operated in the establishment of an hereditary right of power, aristocratic privileges of birth, perpet-

uation of property in particular families, arrangement of castes, and more than all, in the power of making war, which by some strange perversity of human fortune has not belonged to the people whose blood and treasure are expended in its operations, but to some arbitrary ruler, for whose ambition or pleasure they are wasted. War has been the great enemy of the natural rights of man.

“ There the shout
Of battle, the barbarian yell, the bray
Of dissonant instruments, the clang of arms,
The shriek of agony, the groan of death,
In one wild uproar and continuous din
Shake the still air.”

All this in its excess, and in proportion to its prodigality of excess, is victory, and victory, in the insane imagination of a ruined world, is the climax of glory.

But war, whether in victory or defeat, degrades and subjugates the mass of the people.

“ Kings it makes Gods, and meaner creatures kings.”

It multiplies tyrants and ruins men. It might be supposed that the arts of civil life, and especially the mechanic arts, or some of them, would flourish in a state of war. Undoubtedly they do ; but the men and the horses of the camp are about upon a par. The artisan is used, not respected. From its rank luxuriance, a crop of heroes spring up, who consume every green thing in the quiet days of peace. The Mechanic may indeed become a soldier, and acquire as he often has done, distinguished honor in the field. By doing so he changes his character. He leaves his proper employment, which is to build up the community, and becomes the artificer of ruin.

War, — as a substitute in a nation for that principle of self-preservation which, in an individual, is the first law of nature, and of that personal honor, without which existence is not a blessing, and as a means of preserving among a people, a high love of country predomi-

nating over love of life, — is not indeed an unmitigated evil, but it widens and makes permanent the artificial distinctions of society, strengthens the claims of power, degrades the laboring classes, and treats human beings as mere food for powder in the general arrangements of a campaign of glory.

But what the positive provisions of law or government, have failed to accomplish in marking out the arbitrary distinctions of classes, has been carried to a great extent, by an erroneous and delusive public opinion.

The Providence of God, which can regard nothing as personal but character, assigns to each individual his peculiar condition in the family of mankind, and establishes his measure of duty and his ultimate reward, according to his conduct in a position where a seeming fatality has placed him. But the world is full of artificial distinctions, produced by its own false judgment. It degrades one man, or one class of men, by false and irrational opinions, by perversion of natural right, by unjust estimates of human action. It often adopts the very errors in practice, which it has forbidden by law ; establishes an aristocracy of wealth, where it has prohibited the nobility of birth ; allows an exclusiveness of pretension, where it abolishes the claim of right ; and assigns the honors and rewards of life by some theory of excellence, which is from time to time modified according to the caprice of the age.

It would be difficult to explain, on any rational principle, how this theory has been constructed, during a great part of the history of our race. It seems to have rested principally on two considerations, **REVERENCE FOR POWER, AND CONTEMPT FOR LABOR** ; reverence for power over mankind, no matter by what means it was acquired ; and contempt for labor performed in their service, no matter how useful might be its products to the community.

A sentiment of this kind, in its full force, is the characteristic of a barbarous people ; but with modifications of no very considerable

importance, it outlived the ruder ages of antiquity, sustained by a class that everywhere arrogated exclusive superiority ; and conceded by the multitude, unconscious of its dignity or its strength.

It was natural, perhaps, that in the earlier formation of society, personal prowess or heroic courage should be the source of personal honor, as being the most obvious qualification for the security of a defenceless people ; and we do not therefore wonder that the opinion of that age assigned to the fabled Hercules a place next to the Gods. But it was after the imposing magnificence of Roman story, — its arts, its arms, its philosophy, its fame, but indeed in the period of its decline and approaching fall, that a Thracian peasant, by his skill in wrestling and the foot-race, made himself master of the Roman World.*

In periods, which by a delusive light, have been considered the most splendid in history, the mechanic arts were, by an epithet of intended humiliation, termed the servile arts ; and the exercise of them confined chiefly, — as now they are among the North American Indians, — to women and slaves. When the accommodation of a luxurious people demanded some skill beyond that which these classes could exercise, the artisan was numbered among nominal freemen, but indeed in public estimation, and even in his own, was little elevated above the domestic animals with whom he labored.

We open the records of a past age to learn the labors of our race. A false philosophy directs the opinions they commonly inspire. We read with astonishment of a Chinese wall traversing high mountains and deep valleys, and throwing its arches over wide rivers, for a space of fifteen hundred miles. We are told of the great power by which this tremendous effort of human labor was commanded, as if the control of the millions who accomplished it was the proper subject

* Gibbon, Vol. K, p. 8.

of our admiration ; but these millions of human beings, collectively or individually, excite no more interest than the stones of which it is composed.

We listen to a description of the Pyramids, and to the controversy of learned men for what probable purpose this gigantic effort was made. Here again it is power ; individual personal power we are taught to admire ; while the degradation of the uncounted population passes by as a natural incident of the age.

The Parthenon and the Pantheon are objects now of as much idolatry as to the enthusiastic Athenians. The surpassing magnificence of the Imperial City, its temples, theatres, circusses, porticoes, baths, gardens, arches, bridges, aqueducts, columns, sepulchres, carry to its seven hills all who in this age of motion can travel, and bewilder the imagination of all who can read. But notwithstanding the romance of history in relation to Grecian glory and Roman renown, what were the men by whom these wonders were accomplished ?

In the relative situation of the government and the people, — in the comparative estimate then made of power and labor, these mighty monuments are everlasting witnesses of the degradation of the great family of mankind ; triumphal arches of oppression on one side, and ignorance on the other ; when the condition of the mechanic, by whose arm their stones were rolled one upon another, and the temples covered with transparent Capadocean marble, notwithstanding the occasional outbreaks of a spirit of freedom, which was in truth nothing but sedition ; and temporary power in the government, which was a mockery of popular rights ; was in all that regards the character or personal influence of the individual or the class, wholly without consideration or respect. Personal labor was a degradation, and the laborer was a slave.

It would afford very little satisfaction to follow this illustration into more recent periods, or to trace the difference between the ruling and the laboring classes, where such distinctions are preserved, either

by positive provisions in the political organization of society, or by an overpowering influence of public sentiment equally tyrannical.

We look for a new era of history. A change is taking place in the institutions of society, in the course of human action, in the force of moral principle and in the sovereignty of public opinion, which will influence all the relations of life.

The causes of this change are to be found in the intellectual improvement of the age ; in the diffusion of the principles of Christianity, which by means of this improvement, will more and more commend themselves to the hearts, as they are found more and more consonant to the welfare of mankind ; and as a consequence of these, the extension of that system of civil government, the offspring of intelligence and religion, by which Power is limited, defined and responsible ; which is reconciling by its efficient chemistry, the conflicting elements of liberty and law, proposing the advancement of the race as the object of honorable fame ; bestowing its rewards on successful labor, corporeal or intellectual ; bringing into fraternal connection all whose work of any kind is industriously performed ; and making the **WORKING MEN'S PARTY THE NOBILITY OF THE WORLD.**

But this anticipated progress of mankind is not founded on any fanciful theory of the actual divinity of human nature, inconsistent with past experience, or in a re-construction of society upon any imaginary basis of perfection.

The attributes or faculties of man may be enlarged or diminished, but their essential character cannot be changed. Providence has given him no passion, no inclination, no desire, which, within the restraints of reason, is not calculated to promote his welfare ; and has implanted no virtue in his nature, and no tendency to it, which, unregulated by discretion and judgment, does not degenerate into vice.

Neither can there be any rational expectation of a re-construction of the frame-work of society. Civil power must exist, because political government is essential to good order. Labor too must be performed, because it is a part of the machinery of life ; but both will be conducted upon the principle, practically as well as theoretically admitted, that the great object of human existence is universal happiness ; the great means of happiness, universal virtue ; and the only security for virtue, universal intelligence.

This new era is already commenced in the country which it is our happiness to call our own. Government and people are here one and the same. Here is no hereditary right of power ; no aristocratic privilege of birth ; no formation of castes for specific employment ; and the option of peace or war, so far as the nation itself has a voice in declaring it, rests with those by whom its burthens must be borne. Above all, the force of public opinion goes with the current of established law. There is indeed nominal classes, and great variety of individual condition, but nothing that perpetuates these relations, which are changing with every wind. They rise and fall

“ Like summer seas that know no storms, but only
Are gently lifted up and down by tides.”

The right of possessing and protecting property is secured in the amplest manner by our fundamental laws, and it seems impossible that the practical right of property, and the theory of equal rights, should be adjusted by a more reasonable standard.

But this right of possessing property, which is at the foundation of all liberal government, and is solemnly secured by the original compact of the people, is itself the foundation of an inequality of condition, inseparable by any human alchymy from the right itself. There is not by the Constitution, nor can there be in practice, any limitation of this right, but the honesty of the means used in its

exercise. The superior faculty of one man over another, and the accidents of life, which for good or for ill make sport of all human faculty, render the condition of society in respect to wealth full of variety. One man becomes rich without merit, and another poor without crime. One man has the blessing of Providence on his industry ; another its curses on his laziness.

A desire for the acquisition of property is the spring of human industry. Without property in some way acquired, a man starves, or is a houseless vagabond on the charity of his neighbors.

Labor of some sort is the prescribed means of acquiring it, and hence an assiduous employment of time, in some lawful occupation, is among the most prominent private virtues.

The encouragement of labor implies that its rewards shall be secured, and held to be the evidence of an honorable obedience to the laws of society under which they are obtained.

But what is property, as a reward of labor, but the possession of the means of personal enjoyment ; and what is the difference between little and much, but the extent or limitation of those means in the hands of the possessor ? All the progressive states of property, as it rises from the means of bare subsistence to comfort, luxury, or the splendor and magnificence of wealth, are but degrees of that power which is, by the institutions of the most theoretically democratic society, conferred on those who possess property in conformity to its laws.

To say that a man of property has more means than his neighbor, is only to say, in other words, that he is a rich man. To say he thereby enjoys more advantages, is only to say that he uses those means at his pleasure. To complain of this, as an unreasonable inequality, is not merely to censure the institutions of the country, but the course of Providence, and the moral constitution of man. To found on this variety in condition an hostility between the two classes, always temporary in the individuals composing them, and

constantly changing in their relative numbers, is to pervert the necessary condition of an active and enterprising people, into a cause of anarchy and confusion.

What is termed property, is made such by the force of municipal law, and is therefore held by its possessors under limitations, and according to conditions, which the law, — in our country another name for the general will, — sees fit to prescribe. Hence, with a strong hand but a prudent policy, the law prevents its accumulation by entail, and annihilates the aristocracy of primogeniture by a statute of distributions which is the Magna Charta of Republicanism.

Wealth can never, in this country, constitute a permanent patrician order. The tide of time rolls over it, and its sands are mingled with the dust of earth, to be re-gathered and melted into new ingots by some hardy son of successful labor, himself the founder of a family equally transitory.

The possessors of wealth are unquestionably answerable to their country and to public opinion for the manner in which it is employed. Individual cases of oppression and extortion, no doubt, are to be found, but the days of hoarding avarice are gone by. Wealth must be used to be of any value, and it is therefore mixed in the common mass of the wares and merchandise of commerce and the materials of labor. You find it invested in the mansions that beautify your cities ; in the rich farms that make the country one great garden of fertility ; in the ships which carry your commerce over the globe ; — in your Rail Roads, whose iron arms bind your whole country in one neighborhood of kindred families ; — in those countless steam-boats, which cover your mighty rivers and broad lakes ; — in those manufacturing establishments, which give employment to your native population, and keep the sons and daughters of Massachusetts within the influence of the institutions, and enable them to preserve the character and prosperity of the old Bay State ; — in those associations which lend capital to industry, or

divide the misfortunes of life ; in those more noble institutions of Education and Benevolence, where Charity ministers to the wretchedness of bodily anguish ; and Intelligence pours her exhaustless treasures upon the mind.

It is common to express and to feel an honorable pride in the wealth of the country. Its growing and almost illimitable wealth is the boast of patriotism with all political parties and all public men. In what does this wealth consist? Simply in the prosperity and affluence of the people. The country has no hereditary domain. Its wild lands are worth nothing till they are purchased and paid for by its citizens. Their separate individual possessions constitute the treasury of national wealth.

The wealth of the citizen, it is equally obvious, is at once the source and the reward of labor.

Mere labor like mere gold can do nothing. The hands of man, without tools, would hardly keep him from starving ; and gold, if it could not find hands to employ, would be equally useless. Acting together they produce those magnificent results, which out-run the boldest imagination.

It is the indissoluble copartnership of capital and labor that constitutes the business firm for enterprises of gigantic magnitude. It is the harmonious co-operation of the in-door and out-door partner, that sustains them and proceeds with them to a successful result.

There can be no quarrel between actual capital and honest labor. The head cannot say to the hands, I have no need of thee, nor the hands to the feet, I have no need of thee. The man who has property, and the man who is willing to work for it, easily understand one another, and join hand in hand ; but the man who has no property and no disposition to earn any, who lives upon credit with no means and no expectation of repayment, who speculates on the chance, that if he is successful the gain will be his, and if

he fails, the loss will be his creditors, rapacious of other people's property, and prodigal when he has any of his own, he it is that deranges the order and business of life, and imitating the style and splendor of wealth, brings in his bankruptcy, ruin on innocent sufferers, and odium on the class to which he affected to belong.

It is extremely objectionable to take the condition of the laboring classes in other countries, and argue from their degradation, that a like state does, or will exist among our own.

There, the people lie under the weight of ancient institutions, established in darker ages, and not only vicious in themselves, but accumulating their evils from century to century, until the present mass becomes intolerable, and yet irremediable without a revolution. Our institutions, on the contrary, are brought out in the bright days of intelligence and freedom.

The immense disparity of individual fortune there seen, does not so much establish classes in the same society, as it divides society into two or more distinct, and it may be, hostile parts. Here such disparity does not exist at all, and the tendency to it is constantly checked within the life of the fortunate individual. There is no such thing among our free population as excessive labor, because there is no need of it, with such exceptions indeed of particular cases, as serve to prove the generality of the rule. Fashion too, though she sometimes plays very fantastic tricks, does not quite turn night into day, and make labor necessary at unreasonable periods; and where there is a tendency to this species of folly, there is a salutary control in public opinion. There are no classes of respectably idle men among us. All idlers of whatever degree, go by the common name of Loafers. Every man, to be respectable, must do something; and he loses his station in society, if while he is of a proper age to labor, he has no regular and honorable employment. It was the remark of a foreigner, that Boston was the hardest place in the world to find any body to help him do nothing.

The consequence of all this industry is wealth, and the result of wealth is luxury ; and luxury, according to some modern economists, is injurious to honest labor and a defect of the social system. But a vast proportion of all the active employment of mechanic industry in the United States grows out of the factitious wants of luxury and wealth ; and these wants, and the supply of them, constitute that circulation of capital and labor, which preserves, not the mere health, but the elastic and buoyant spirit of the people. Unquestionably like every thing else, luxury may be carried to a dangerous excess. It may interfere with charity and even humanity. It may enervate the body politic by an effeminacy that is degrading, and by an example that is ruinous.

All this is the extravagance, the abuse of a condition of things which may, nevertheless, be salutary in its legitimate operation. But the evil where it exists is not in our social system, but in the ill-regulated character of individual man. It is to be controlled like any other of the disorders of society, not by changing the social institutions, but by infusing a higher moral principle into the bosom of the community. It is not easy to point out the exact line which divides luxury from convenience, comfort or even necessity. It is undoubtedly a shifting line, to be drawn according to personal means, and the power of example under a moral restraint imposed on the citizen.

For all these obligations the individual himself is answerable on his responsibility for his personal conduct ; but luxury itself is the patron of all the arts, inasmuch as they are essentially devoted to the refinements and elegance of life.

“ Allow not nature more than nature wants,
Man's life is cheap as beasts.”

It would hardly do for our society to adopt a different doctrine. Let this magnificent exhibition be annihilated ; let the products of mechanic skill be crushed by some ascetic or Spartan philosophy, and the

arts themselves obliterated from the records of life. We might live, — live like the Esquimaux, or Indian in the unsophisticated state of original existence. The arts are themselves luxuries ; the exhibition of them is a luxury. The mind enjoys this luxury as a high elevation of its nature ; as a lawful indulgence in the rich blessings of Providence ; as a progress toward that perfection which it is enabled to work out for itself, by the exertion of its noblest faculties, and in conformity with its proud destination.

It is a cavilling spirit that makes the luxury of life a subject of complaint because its direct enjoyments are necessarily confined to limited numbers. Indirectly they extend to all classes. They keep in circulation the vital air of the political system. Hardly will it do for our industrious yeomanry, who are covering the country with the *Morus Multicaulis*, until our silk-worms shall out-number the produce of the celestial empire, to rail at the luxury of a silk dress as an aristocratic distinction. Our splendid manufactories of silver are worse than useless, if it is a sin against Democracy to use a silver fork. The coach-maker must change his trade, if the fair daughters of the country may not be indulged with a carriage. The saddlery, which is in such exquisite finish in the Hall of Exhibition, is something like the armor of treason against the republic, if we come to the conclusion that it is for the benefit of the laboring classes that every man who rides at all must go bare-back.

But it is indeed true on a great scale as a small one, that "there is always weal and wo in the world's gear."

One of the misfortunes of our social system is, that there is no great and leading object of ambition or desire that comes into competition with wealth. Hence the love of accumulation is the absorbing and maddening spirit of the country. It is supposed that its impetuous influence, which in its excess does not augur well for the purity or duration of the Republic, has of late greatly increased. Yet it was so mighty in its operations twenty-five years ago, that

an eminent statesman* of Massachusetts advocated a war with Great Britain for this, among other reasons, "that the spirit of patriotism was descending into a grovelling spirit of gain, and the nobleness of public virtue into the chicanery of private interest, and that it was for the common good of the country to revive the self-devotion of the Revolution, by opening a new field of danger and glory."

There may be some cause for such sentiments in the present day. An intemperate desire for wealth leads to illegal acts for its acquisition; to devices of ingenious fraud; and to controversy and complaint between the possessors and competitors for property.

But the appropriate remedy for this disease does not appear to be that harsh and caustic application, — suggested from high authority, — "a more righteous and equal division of property."

This can hardly be done without "revolutions and agrarian disorders," and a violation of that right of possessing and protecting property which the constitution secures. Nor is it easy to see how the term righteous, introduced into the receipt, is any thing more than a paradoxical expression.

But the answer is, that it is not the possession of property, and of course not the inequality of it in the hands of its legitimate owners, that produces the evil. The trouble proceeds from that intensity of desire, which no quantity could satisfy; from an appetite for its pleasures, whose increase doth grow by what it feeds on; from an ill-regulated state of moral feelings, which are reckless of justice or right, and seek only their self-indulgence, whatever may be the consequences.

These incidents do not in the least cast a doubt upon the progress of that improvement, which is to form the new era of history. We are passing through a revolution, not closing it. The elements of

* Vice-President Gerry.

life, of thought, of feeling are in commotion, as are those of the natural world when the sun-light is struggling through the storm. When they shall be tranquillized, is for Him to determine with whom one day is as a thousand years, and a thousand years as one day. Nobody pretends that the social system is yet perfect. But the fault, where any remains, is in the character of the individuals, and not in the principles on which it is adjusted. All force or violence of action or feeling will only serve to protract the time for the consummation of its advantages. We know indeed that the demon of war is not yet banished from the earth, nor indeed can be, while encouragement is given to a pitiful submission to insult or national degradation, which invites his continuance and exasperates his ferocity. But a better temper than ever before prevailed, regulates the exercise of power in this respect.

“Neither government or people, — thank God for it, — can now trifle with the general sense of the civilized world; and the civilized world would hold them to a very strict account if, without very plain and apparent reasons, deeply affecting the independence and great interests of the nation, any controversy should have other than an amicable issue.”*

The evil spirit of intemperance is not exorcised, nor indeed can be, under the operation of penal laws that fetter the action without influencing the will. But who doubts that this enormous monster is in the hands of a giant, and that intelligence, the Hercules of our day, will signalize by its overthrow, the most important of its labors.

Slavery is not abolished, nor indeed can be, while an irritating opposition is kept up, that strengthens the passions of the master, and inflames the ferocity of the slave. But under the influence of the principles of the age, the manacles of oppression will melt in the solvent of time.

* Mr. Webster's speech at Oxford, England, 1839.

Power is not sufficiently limited, nor indeed can be, while it is advanced or retarded by organized associations, acting on their private opinion beyond or against the legitimate expression of the public will.

Labor is not sufficiently respected, nor indeed can be, while Trades Unions undertake to regulate by compulsion, what belongs to the voluntary efforts of equity and justice; or while the active and industrious laborer places himself under the direction of lazy and idle declaimers, and permits those who dread the very thought of a day's work, to be representatives of working-men.

But the temples of an ignorant idolatry totter to their base. The cause of peace, temperance, emancipation, and justice are in glorious progress, and have most need to implore that they may be saved from pretended friends.

The natural world furnishes us with an analogy to these expected changes in human society. Modern geologists reveal to us an age of reptiles, at some period of remote antiquity, before the creation of man; when Saurians and Ichthiosaurians, to whom our sea-serpent is a tape-worm, swarmed in the ocean; and Megatheria, to whom, in magnitude the mammoth is a lamb, and in ferocity the tiger a kitten, roamed on the shore in frightful multitudes.

“ Fiends
O'er bog or steep, through straight, rough, dense or rare,
With head, hands, wings or feet, pursue their way,
And swim, or sink, or wade, or creep, or fly,”

sole occupants, and fitted to endure the turbulence and continual convulsions of the unquiet surface of our infant world, until by some revolution in the physical condition of the globe, as astonishing as unaccountable, these terrific monsters disappeared, and man became its proprietor and lord.

The moral geologist of a future age, looking backward through a long vista of time, till he reaches the fossil remains of the period

through which we are passing, will describe to the incredulous ears of his astonished countrymen, how the tremendous Saurian of war, and the more horrible Ichthiosaurian of intemperance, and the mighty Megatherium of slavery, with all the extinct species of kindred reptiles of deformity and crime, swarmed in this eocene period of our moral formation, until the revolution was completed, and intelligence and christianity swept them from the earth.

In producing this grand amelioration of the condition of our race, the mechanic interest has exerted, and is exerting, an immense influence as one of the most prominent classes of intelligent labor.

Every occupation recognised in the business of life, comprises, in a greater or less degree, an exertion of body and mind. But society is very much indebted to classes of men, who do very little manual labor; and to other classes, whose mental faculties are in a very humble way called into action; while between these there is a great class, who unite theoretical knowledge with practical skill.

"In this class," — says an eminent writer, — "the power of man appears in its full perfection, and fits him equally to conduct, with a masterly hand, the details of ordinary business, and to contend successfully with the natural difficulties of new and hazardous situations."

This description includes the mechanic interest of the United States. Intelligence and strength, intellectual and corporeal labor, ability to conceive and to execute, vigor of mind and of body, clear heads and hard hands are its characteristic distinctions.

The agency of this class, in the improvement of the age, was first exerted to bring respect and honor to their occupation and themselves. How nobly they succeeded this proud exhibition of mechanic industry, now open to public inspection, the long roll of distinguished mechanics sent to the councils of the country, and the unrivalled influence which, as a class, they maintain over public opinion, are trumpet-tongued witnesses.

There was a simultaneous movement for political liberty, and the diffusion of knowledge. In the days of the Revolution, they left the work-shop for the camp. In the infancy of the Constitution, they quitted for a time the calls of labor, to rock the sleeping infant in the cradle of liberty.

The mechanic interest, by a necessary movement, lent its strength to the cause of order, justice, and regular government,

“ With Atlantæan shoulders fit to bear
The weight of mightiest monarchies.”

Popular government rests mainly on the laboring classes. A reciprocal energy elevates both. It is only in the degradation of these classes that they become slaves of power or ministers of anarchy, countenance revolutionary notions about property, or subvert the wholesome authority of law. As a class, they can never be poor. As a class, they can never be rich. The prayer of the pious man has been accorded to them, to be kept from poverty or riches; to possess that rational and happy competency, which is the best condition for the public welfare, as it is supposed to be for personal happiness.

Unquestionably, there are exceptions of splendid character in our community, and in our society; but as a general result it may be stated, that so long as a mechanic works, he cannot be poor, — so long as he does nothing but work, he will not be very rich, — that is, rich in comparison with the favorites of commerce, or other dealers in the great chances of life. This is that position in which men feel the necessity of government, and become attached to it.

It is the hard-earned property of industry, which needs protection; the reserved fund for a rainy day; the future widow's dowry; the anticipated orphan's heritage. To these, men look with a solicitude beyond the amount of the money, and feel their security in wholesome laws, faithfully executed.

He who has two houses, may possibly preserve one, in any system of agrarianism ; but he who has but one, is sure to lose it, when he is to take common share with the profligate or the lazy, who have nothing. It is not on the possessors of great wealth, that dependence can be placed for upholding law or government, when either is in jeopardy. They have too much at hazard, are too timid, too fearful of consequences ; they temporize and play off, till the opportunity has gone by. Nor in such emergency, can any dependence be placed on a class of men, who, having no stake in the community, affect to feel that

“ The world is not their friend, nor the world's law.”

The true conservative spirit lives in the hearts of the middling interest men, whose fortune, though moderate, is fortune to themselves and their children, earned by hard toil and patient industry, gathered by slow accumulation, and too dear to be torn from them in riot and anarchy. Such men feel that for the common security, a republican government must be a strong government, because the standard of moral and political right is higher there, than under a monarchical or aristocratic administration. They feel that men must conform to the standard, voluntarily if they will, but at any rate, that they must conform to it. They feel the necessity of sustaining free institutions by the respect of the people, which is the only substitute for the compulsive operation of power.

The agency of the mechanic interest, in the improvement of the age, is exerted, in its immense contribution to personal domestic comfort and national glory, and to the refinement of the public taste, by the beauty, durability, and high finish of the articles which it produces.

It is difficult to ascertain, with exactness, the amount of this contribution, because it enters into every department of life, and the

minutest of its daily concerns. A calculation derived from the statistics prepared under the order of the Legislature of Massachusetts, would give, in our population of seven hundred and one thousand, three hundred and thirty-one souls, for a part only of this contribution, eighty-four millions of dollars per annum, in mechanic labor, upon forty-two millions dollars of capital ; and by reasonable addition, for the great departments omitted, at least a sum total of more than one hundred and fifty millions of dollars of labor, on eighty-four millions dollars of capital, for the year 1837.*

But the magnificent exhibition at Quincy Hall confounds all these calculations. We feel the total inadequacy of mere money to measure its operation upon society. We see that it has annihilated the ancient distinction between the fine arts and the mechanic arts, and that civilization is itself carried on and perfected by those ingenious contributions of exquisite finish, of new design or more perfect adaptation, which refine and beautify every condition of human life. It would be impossible, and is not expected, that any detail should be given of this splendid exhibition. It has been seen and admired by upwards of fifty thousand of our fellow-citizens.

Although everything is now apparently conducted by machinery, it is to be remembered that the machine is the result of mechanic art. The philosopher, who measures the movements of the planets ; the engineer, who plans new avenues upon the earth, are under equal obligations to it for the wonderful precision of their instruments ; the theologian and jurist, for their typed and stereotyped books, and lithographic illustrations, and the paper, unknown to the ancients, which is ground from pulp, to a sheet fit for writing, while they are making a pen ; the physician, for all that is in the chemical laboratory ;

* Statistical Tables exhibiting the condition and products of certain branches of Industry in Massachusetts for the year ending April 1, 1837, prepared from the returns of the Assessors, by John P. Bigelow, Secretary of the Commonwealth.

and the surgeon, — it makes one's blood run cold to think of it, — cuts upon the living and quivering flesh of his patient within a hair line of the seat of life, by a confident reliance on the perfection of his knife. It comes feelingly to the bosom of every man, who now, more fortunate than the luxurious Roman, enjoys the comfort of a linen shirt; and to every woman, whose wardrobe, richer than that of the voluptuous Queen of Egypt, supplies her with a pair of stockings. But although it is not possible to speak in detail of this magnificent exhibition, there is one quarter of the spacious hall, which it would be unpardonable not to notice; that is, the room allotted to the contributions of the mechanic apprentices. It serves to shew, that the ingenuity and the industry of the fathers, are to be preserved and extended by their sons.

When it is considered that knowledge is not transmissible like property; that there is neither entail, nor legacy, nor statute of distribution that will convey genius, or learning, or skill, to the coming generation, and that the fabricators of all these wonderful specimens of ingenuity must soon die, we might feel some apprehensions for the future, did we not find our young men panting to take their start in the business of life, rivalling their fathers in skill and industry, and giving promise, that in their day, they will carry to yet greater perfection, the grand machinery of civilization and improvement. In reference, however, to this interesting class, it may be permitted to me respectfully to suggest, whether, while so much is done for their instruction, something should not be added for their amusement. Do we forget the homely adage of the nursery, which in humble phraseology conveys a deep practical truth, that "all work and no play makes Jack a dull boy." Are we getting to be too stern, rigid, and cold in our feelings; too formal, precise, and severe, in the harder requisitions of duty, without reflecting that to promote cheerfulness, good humor, and rational hilarity is a necessary part of every wise system of human government?

One half the intemperance, and more than half the riots of the day, are the ebullitions of youth forcibly restrained from lawful indulgence. Young men without regular means of gratifying the inclinations of their age, which it is absurd to think can be extinguished, in sports, games, exhibitions, or exercises suited to their age and time of life, finding it necessary to skulk from the public eye, whenever the mill-horse path of life is to be quitted for an hour, are almost driven into illicit indulgences.

A more liberal system and a better tone of public sentiment, would advance the morals, improve the minds, and nerve the bodies of the rising generations.

I do not recollect, that in your splendid exhibition, two articles make any considerable figure, which a southern senator, on a recent visit among us, considered to be the chief product of New England, Granite and Ice. But the real staple of our hard soil is everywhere visible; viz: — free labor and mechanic skill. These powers convert our granite into palaces, and make the isicles, which nature elaborates in our cold country, melt into streams of gold in the coffers of our enterprising citizens.

Let him rejoice in his orange groves, and his sunny sky. There is a dark spot there which chills the heart. We love New England.

“ Land of the forest and the rock —
 Of dark blue lake and mighty river —
 Of mountains reared aloft to mock
 The storm's career — the lightning's shock,
 Our own green land forever !
 Land of the beautiful and brave —
 The freeman's home — the martyr's grave —
 The nursery of giant men,
 Whose deeds have linked with every glen,
 And every hill and every stream,
 The romance of some warrior-dream !
 Oh — never may a son of thine,
 Where'er his wandering steps incline,
 Forget the sky which bent above
 His childhood, as a dream of love.”

By a beautiful economy of Providence, all the useful arts, like the virtues of life, are united in a close connection ; * so that the advance of one necessarily carries the others with it, and a common benefit accrues to all, by an impulse that promotes the advantage of either. The account of debt and credit is kept very nearly balanced in the ledger page of mutual exchanges. If the mechanic is indebted to agriculture for producing the means of subsistence, he repays the obligation, by providing better implements of husbandry. The plough, the axe and the spade, in their present state of perfection, are among the donatives of the mechanic to the yeoman ; gifts of the artificer of nature's productions to the lord of the soil. The mechanic is, no doubt, largely indebted to the merchant, in whose magnificent enterprises he finds materials, often for his industry, and always for his reward ; but he repays this obligation, by presenting him with that noblest production of ingenuity and mechanic skill, that wonderful creation of intellect and strength, of more endurance than the fabled giants, of more speed than a race-horse, and of more beauty than anything of earthly creation, almost up to the present time, unrivalled in majesty and power, — a sailing ship, — a contrivance of mechanic art, which broke down the barriers of nature to the enterprise of man, harnessed her elements for his coursers, and bade him, in imitation of the divine spirit,

“ Upon the wings of mighty winds,
Come flying all abroad.”

And when this imitative world of mechanic construction, freighted treasure, and crowded with human life, is launched upon the trackless ocean,

“ In shade and storm and frequent night,”

* Habent quodam commune vinculum et quasi, cognatione quadam inter se continentur. — *Cic pro Archias.*

with no star for its direction, and no voice to guide it over the wilderness of waves, the mechanic's art gives to the confiding mariner a little piece of iron, no bigger than an agate stone, that with unerring fidelity points but speaks not, yet touched with such exquisite sensibility that it trembles while it turns, as if it was a young heart whose affection hardly dared trust itself to the expression of its love ; and by its side, places another little imitation of life, that sleeps not, tires not, but counts every knot of his progress, and with a prophet's miraculous foresight, tells his distance from the unseen shore.

For the compass and the chronometer, in their primitive state, the world is indebted partly to science and partly to fortune ; but for the perfection of these delicate instruments, which are almost endowed with reason by the extreme precision, exactness, and beauty of their workmanship, the obligation is transferred to mechanic ingenuity and skill.

But this magnificent offering of mechanic art to the enterprise of commerce, fades before the more astonishing gift it has made, not to commerce merely, but to arts, arms, learning, morals, manners, and, indeed, to all the great interests of life, in its complicated and wonderful machinery for the operation of steam.

The power of steam is affecting the civilized world to a degree much beyond that which resulted from the compass, the printing press, or the use of gunpowder, because, to the original potency of these great agents, it has superadded a force that cannot be expressed by any formula of arithmetic ; but it is by the mechanism through which it is made to work, that it is operating to this prodigious extent.

Give to science and philosophy, if you please, the glory of discovering that there was a power like an earthquake or volcano, and that it might be directed by human art. Where was the mighty magician, who could seize its elastic spirit, and confine it like the fairy of Eastern fable, sometimes in a bottle, and again to the limits

of the globe? What modern *Æolius* could imprison it in its walls, stronger than the cavern of the winds? Where was the mighty Jupiter of the elements,

“ To confine its fury to its dark abodes,
And weigh it down, oppressed with mountain loads,
Impose a king with arbitrary sway,
To loose its fetters, or its force obey :”*

This is the prerogative of mechanic art.

The steam-engine, in its present most admirable and exact adjustment, in the nice adaptation of its parts, and the curious facility of its contrivance, brings into practical use this tremendous agent of nature, and compels it to become the willing slave of man. Philosophy could direct, but mechanic skill only could perform.

It is among the inventions of German literature, that an ingenious investigator of the mystery of causality was enabled to form a gigantic human being, and endow him with life ; but being wholly incapable of bestowing upon him a moral perception, he created a monster whose first movements were to destroy his creator.

Such was steam in the hands of the philosophers ; and some tricks of this kind were played off by this modern Frankiestiern, until the mechanic took him in hand, when a physical, if not a moral restraint was imposed upon him by the ingenious enginery in which he is confined ; and although now he would be a terrible master, he is humble and obedient in his chains.

It is therefore not so much steam, as the steam-engine that is working miracles ; for steam was no available agent so long as it

* *Sed Pater omnipotens speluncis abdidit atris,
—— Molemque et montes insuper altos,
Imposuit ; regemque dedit qui fœdere certo,
Et premere et laxas sciret dare jussus habenas.*

was free. And such is heaven's lightning, which already the intrepidity of mechanic art aspires to confine and control, and which it is very possible may be made subservient to the purposes of man. Some future Fulton may chain it to the ship, or the car, and Yankee impatience, not then contented with riding on the thunderbolt, may exert itself to contrive new means of accelerating its velocity.

It is not, however, to fable that we need go for his prototype, although he outstrips, in sober reality, all former fiction, as well as truth. When Whittemore's patent for his card-machine was about expiring, a contrivance of mechanic skill, which, at the time, seemed as miraculous as the rod of Moses, he was advised to erect one in an anti-chamber of the House of Representatives of the United States, with a view of obtaining an extension of his grant. It was accordingly put in operation in presence of many members of Congress. One of the honorable body, not much inclined to admire northern men or northern manufacturing establishments, gazed at it for some time, with the utmost surprise. At length, stretching out his bony arm, he exclaimed, in his peculiar intonation : —

“ These Yankees have made an iron creature, with hands and fingers as delicate as a woman's, and with almost as much sense.”

Whoever examines the improved steam-engine will find not fingers only, but head, heart and limbs, a circulation of fluids as exact as the arterial system, and, seemingly, every thing that belongs to man, but his soul.

Look at the graphic picture of a single form of it, lately given by an elegant writer on the subject of rail-roads : —

“ The tearing and deafening noise with which this noble animal of man's creation advances to his work, demonstrates that it has no fear itself, but comes rejoicing like a giant to run his course. If the character of the noble creature be considered for a moment with that of a horse, the comparison is curious. With sufficient coals and water in his manger, which, it must be observed, whenever he

travels he takes with him, he can, if the aggregate of his day's work be considered, carry every day, for ten miles, at the rate of sixteen miles an hour, the weight of an army of twenty-one thousand, five hundred and four men, of ten stone ten pound, each, whereas, a good horse could not, at the same pace, and for the same distance, continue to carry every day more than one such man. For a distance of eighty miles, he can carry two thousand six hundred and eighty-eight, at a rate (sixteen miles an hour) that neither the hare, the antelope, nor the race-horse could keep up with him. No journey ever tires him. He is never heard to grumble or hiss, but for want of work ; the faster he goes, the more ravenously he feeds, and for two years he can thus travel without medicine or surgery."

The steam-engine* of the mechanic is to become the pacificator of the world, by making war so obviously ruinous, and confounding victory and defeat in one general and inevitable destruction of the combatants, that there can be neither motive nor object in the contest. There can be no naval warfare, when ships of the line are driven from the ocean by steam frigates. Naval tactics, which heretofore have witched the world with noble seamanship, become useless before a power which takes the weather-guage

* In the course of a well digested lecture on the steam-engine, by Mr. Sims, of Chacewater, delivered at the Truro Institution, a comparison was drawn between the engines of Watt's time, and those of the present day. As nearly as the average of the former could be obtained, their duty could not be more than 15,000,000 lbs., lifted a foot high by the consumption of a bushel of coal; while in Messrs. Lean's report of the last month, the average duty of sixty-one pumping engines were found to be 54,000,000 lbs. Those sixty-one engines consumed for a month, 4,283 tons of coal, and lifted 41,000,000 tons of water 100 fathoms high. The same number of engines in Watt's time would, to do the same work, consume 15,418 tons of coal, which at 15s. would be £11,563; from which deducting £3,211, the cost of working at the present day, there would remain £8,352 per month, or upwards of £100,000 a year, saved in fuel on sixty-one engines. The greatest load lifted by any engine now at work in this country was by one in the consolidated mines, which raised a load of 9,000 lbs. every double stroke it made, and did this nine times a minute, amounting to 567,022 tons, lifted 7 feet 6 inches in twenty-four hours; and this astonishing machine could be started, stopped, or regulated, by a little boy.—*Mechanic's Magazine*.

from the wind, and bears up to the encounter as if *Ætna* and *Vesuvius* were spouting at each other cataracts of flame. There can be no land battle when steam cannon shall pour their torrents of shot on the one side and the other, and annihilate both armies before they come within sound of their trumpets.

Nor is this terrible agency the only means it possesses of preserving peace. It is to bring mankind into a common brotherhood ; annihilate space and time in the intercourse of human life ; increase the social relations ; draw closer the ties of philanthropy and benevolence ; multiply common benefits, and the reciprocal interchange of them, and by a power of yet unknown kindness, give to reason and religion an empire which they have but nominally possessed in the conduct of mankind.

The changes which are produced in all the relations of life by the mechanic arts, forces upon us the inquiry, whence is their impulse ? From what source is their power derived ? They act primarily upon the elements of nature, but these elements are always the same.

“ The velocity of lightning, the sound of thunder, the power of the wind, do not increase. The heat of the sun, the blueness of the sky, the freshness of the mountain air, the solemn grandeur of the trackless ocean, remain unaltered. The nest of the bird improves no more than his plumage ; the habitation of the beaver no more than his fur ; and lovely as is the melody of the lark, the unchanged accents of its morning hymn, daily proclaim to us from the firmament of heaven, that, in the congregation of the works of nature, there is no distinction of tenses, for that what is, and what was, and what will be, are the same.”

Gravitation, magnetism, steam, are precisely what they were at the creation of the world. The earth, in its successive revolutions of four thousand years, has neither gained nor lost a second of time. Space, which is measured with so much exactness, and

time, which is determined with such absolute precision, is each what it was before the pendulum was applied to practical use. The physical power of man varies very little from what it originally was. Yet everything about it is in progress of change.

Whence is the cause ? Who is the mighty artificer that travels over creation, and uses at his pleasure the materials of nature ? **MIND.** **THE HUMAN MIND**, the only progressive and improvable agent known to us in the universe of God ; that indescribable and mysterious existence, of whose nature and condition neither science nor philosophy can teach us, but whose actual being and immortal duration is assured to us by innate feeling and a sublime faith. The first lesson we are taught by experience, and the first sentiment which is encouraged by hope is, that it is itself the great and exclusive object of human concern ; that man, the undying, imperishable, eternal man, the same in this world and that which is to come, is the care of an overruling Providence ; that the welfare of the race is the proper object of his affections, and that as this object is more and more developed, it will be found most consistent with his individual happiness, — that for the great purpose of his existence he is endowed with powers extensive and improvable ; thrown upon his own resources, left to his own responsibility. That the grand machinery of creation is intended not to improve matter, but man, to advance him and not that, so that his qualities of mind should be brought out and brightened, and made useful ; his affections purified and ennobled, and that in all the relations he sustains, according to the measure of his individual capacity, in the class in which he is placed — he should be prepared for that superior station, and worthy of that immortal existence which he is destined to enjoy.





AN ADDRESS,

DELIVERED BEFORE THE

THE NEW YORK
PUBLIC LIBRARY

P27268

ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1908.

MASSACHUSETTS CHARITABLE MECHANIC

ASSOCIATION,

AT THE

CELEBRATION OF THEIR TWELFTH TRIENNIAL,
ANNIVERSARY.

THURSDAY, OCTOBER 6, 1842.

BY GEORGE G. SMITH.

★ MASS. HIST. SOC.

PRINTED FOR THE ASSOCIATION, BY J. L. HOMER,
(AT THE OFFICE OF S. N. DICKINSON,)

BOSTON.

BOSTON, OCTOBER 8, 1842.

DEAR SIR:

The undersigned, in transmitting to you the following vote of the MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION, beg leave to express their gratification, at having been able to listen to an Address so replete with interesting and useful information to the working classes of this community; and cannot but hope that the request therein made may be complied with.

Yours with great respect, &c.

JOSEPH LEWIS,
CHAS. A. WELLS,
OSMYN BREWSTER, } Committee.

GEORGE G. SMITH, Esq.

At a meeting of the Massachusetts Charitable Mechanic Association, held October 6, it was unanimously

Voted, That the thanks of this Association be presented to GEORGE G. SMITH, Esq. for his able, interesting, and eloquent Address, delivered this day, and that the President, Vice President, and Treasurer, be a committee to inform him of this vote, and request a copy for the press.

BOSTON, OCTOBER 18, 1842.

GENTLEMEN:

Your very kind letter of the 8th inst. was duly received, and would have been answered sooner had not business engagements prevented. Agreeably to your request, I send you a copy of my Address. I shall make no apology for its imperfections, as they are of course to be expected; and had not our brethren of the Association been willing to make allowances for them, they would not, I know, have desired to see it in print.

I remain gentlemen, very sincerely, your friend,

GEO. G. SMITH.

To Messrs Joseph Lewis,
Chas. A. Wells,
Osmyn Brewster, } Committee.

A D D R E S S .

"It is universally admitted that the combined operations of the mechanic powers, have been the source of those useful inventions and scientific arts, which have given to polished society its wealth, conveniences, respectability and defence, and which have ameliorated the condition of its citizens.

"Rational therefore is the inference, that the association of those who conduct these powers in their operations, will prove highly beneficial in promoting good offices and fellowship ; in assisting the necessitous, encouraging the ingenious, and in rewarding fidelity."

THIS, my friends, you are aware, is the preamble to our Constitution ; and it is to carry out these ideas of our founders, to gather new motives "for mutual good offices and fellowship," to stimulate each other in the good work of "assisting the necessitous, encouraging the ingenious, and rewarding fidelity," that our triennial celebrations have been continued.

On these occasions, our audience must not anticipate any especial display of intellect, since the speaker, being always a member of the association, and generally immersed in the duties of some handicraft, is thereby necessarily debarred from those opportunities of mental cultivation which are indispensable to so high an aim ; and I have therefore chosen the plainer task of endeavoring to collect such facts and observations as may best cultivate and strengthen the spirit of fellowship ; and by

considering our present condition as compared with that of the great operative fraternity in other times and countries, by contrasting the privations and oppressions under which they groaned with our own manifold blessings, to strengthen our confidence and interest in each other, increase our love of country, and awaken in us a lively sense of that Supreme goodness from which these blessings flow. I shall endeavor also to gather from these ideas certain principles, having, as I think, an important bearing upon the social position of our order; as it has been affected by differences in the political institutions of various countries, as well as by the general progress of improvement.

My subject then will lead me briefly to consider the condition of the mechanic in the principal nations of antiquity, and among the barbarous tribes who succeeded them; also to present such facts as I have been able to gather, illustrating in any way that gradual improvement, which, as we approach our own times, is the most interesting point in his history. And in pursuing this train of thought, I may bring forward matter having no apparent connection with it. I am fully conscious also, that much of what I shall have to say is already well known to most of you; but considering every striking trait of national manners or modes of living, and every prominent fact in legislation, as influencing the condition of the mechanic directly or indirectly, I have thrown these materials together as best I might, without any scrupulous regard to order or accurate chronological arrangement. I hope therefore to be excused for any errors in the selection of my materials, or want of clearness in their disposition.

We have very little information respecting the operative classes of the early ages; history has, until within a

few years, been a mere record of political events, and throughout the whole duration of Roman or Grecian institutions, all is darkness except as to the more prominent facts which affect the national power. In Rome, however, the researches of some modern historians seem to prove, that the plebeians, or common people, comprising of course the whole body of the operatives, originated from those captive families, which it was the uniform custom of the Romans, in the early ages of the republic, to drag from their homes, in order to swell their own population. These families having been always the principal inhabitants of the conquered cities, felt their degradation therefore the more keenly; and from this cause, says Guizot, "arose that struggle between the plebeians and the patricians, which commenced in the very cradle of the republic, and was merely a prolongation of the war of conquest; the struggle of the conquered aristocracy to participate in the privileges of the conquerors;" and which continued till the popular liberty was absorbed in the despotism of the Cæsars. We learn, also, that in every Roman city the operatives were divided into colleges, corresponding no doubt with the guilds of later times; but of the constitution of these bodies, or their internal regulations, we know nothing. It is evident, however, that they did not contain sufficient vitality to rescue their order from its social abasement. The condition then of mechanics in Rome, although surrounded by the semblance of freedom, was hopeless; and although we find them, while the republic lasted, continually battling with the aristocracy, yet there was obviously nothing of that gradual improvement which, amidst every discouragement, finally conducted the populace of the middle ages to comparative emancipation and happiness.

Among the Greeks there was more political freedom, the principle of their governments generally was more purely democratic, and there was not, as among the Romans, a privileged aristocracy engrossing all dignities, and under the sanction of law, holding the people in hopeless degradation. But the mechanic was equally ignorant and equally despised; and although the law enslaved him not, yet custom, stronger than law, retained public honors within a few ancient families, and as the operative was in the early ages, so he remained as long as Grecian history had a name.

I have not spoken of Grecian or Roman art, as that subject is a familiar one, and also because our object is to trace what the operative classes have been, rather than what they have done; and a mere catalogue of temples and statues and pictures, would neither lend the subject new light, nor develope new principles.

In pursuing our task, as connected with the other nations of antiquity, we find ourselves for the most part compelled to make use of Grecian authorities; and so profound was the contempt of the Greeks for every other people, that they are merely noticed as events in their history have a bearing upon the destinies of Greece: we can only gather then, as it were incidentally, along the scanty record of political convulsions, some detached hints, which seem to indicate that the condition of operatives among them was not greatly different from what it now is in the more barbarous nations of Asia; the inferior classes, as they were called, being considered little better than beasts of burden, born to be taxed, and plundered, and slaughtered, at the king's pleasure; and subject in all things to the will of every inferior despot, whom chance or court favor may have placed over them; and so they lived, and died, genera-

tion after generation, unpitied, unimproved, hopeless ; leaving the same mournful legacy of labor and sorrow to their descendants, age after age.

So was it too in Egypt, where existing monuments afford us the evidence which history denies : long lines of laborers dragging immense stones ; groups of artisans and husbandmen, all urged to their task by the whip of the taskmaster, are the frequent subjects of their bas-reliefs and pictures ; affording melancholy evidence that there, also, labor was considered a degradation, and the laborer a slave.

And how could it have been otherwise ? The nations of antiquity had not the means of popular instruction ; the ignorance of the populace was a non-conductor, over which the electric spark of intelligence might not pass ; and however vivid may have been the light elicited from individual talent, it could not penetrate the surrounding darkness. But although the minds of the commonalty slumbered, their passions were awake. Intellectual illumination could not reach them, but vice and sensuality could, and with fatal effect ; for as the degeneracy of courts gradually infected the mass of the people, the old habits of simplicity and industry were relaxed, and the whole mass of society became more and more corrupt ; until finally, with scarce an effort to save it, the decaying fabric of the ancient civilization was engulfed by that mighty northern wave which rushed over the land, purifying while it destroyed, and sweeping away every vestige of the existing social order ; but bringing with it also the elements of another, destined to carry forward the human race in a career of improvement, which the dreams of antiquity had never imagined.

Amid the universal breaking up of society which took place at the destruction of the Roman empire, the con-

dition of the operative classes seems on the whole to have somewhat improved; the greater part of the mechanic arts, however, being useless to the barbarian hordes which then ruled Europe, were utterly lost; those only being preserved, which even in that imperfect state of society were indispensable; and which, being exercised by a comparatively small number of persons, were prized accordingly. The worker in iron seems, as may be expected, to have been held in special esteem. Without him indeed their rude communities could not have held together. He made their swords, their spears, their axes, the iron work of their wagons, and their defensive armor; their only civilization in fact was that of the anvil and the forge. We learn therefore that the office of the king's chief smith was one of considerable dignity, and at the court of the kings of Wales his place at table was next to the royal chaplain.

As the wandering tribes of barbarians gradually settled down into regularly organized governments, the mechanic arts were by degrees recovered, until they attained some resemblance to what they anciently were, although in certain particulars we do not seem even yet, with all the resources of modern science, to have fully recovered what was lost. When the feudal system became perfected, mechanics again lost their social rank, and notwithstanding that many handicrafts were exercised in considerable perfection, their professors ceased to be held in esteem, and were treated with that capricious tyranny which belonged to the age; being munificently rewarded one day, to be plundered and perhaps murdered the next. Individual rights were totally disregarded, and life and property became so insecure, amid the universal robbery which every petty noble considered his privilege, that the inhabitants of the towns in

various countries of Europe, were compelled to organize themselves into armed communities for the common defence ; and after a long contest the feudal nobles, finding that the free cities could not be conquered, were obliged to recognize their privileges, and treat with them as independent powers.

This struggle commenced at different times in various countries. The Lombard cities, it is supposed, first became republican in the eleventh century, and there, as in Tuscany also, we find them making war upon and reducing the neighboring nobles to subjection ; so that in the twelfth century there was scarcely a noble family in those parts of Italy which did not profess allegiance to some city. In France, some of the towns possessed charters as early as the twelfth century ; and in Germany, about the same time, they gradually obtained their privileges ; sometimes by purchase, sometimes by force. With the political history of this movement we have nothing to do ; but it is interesting to us as mechanics to notice the fact, that in the free republics of Italy, the communes of France, and the free cities of Germany, the artisan was a free man, enjoying the right of suffrage, and eligible generally to the magistracy. We find everywhere also the same division of the operatives into guilds or companies, each with its own peculiar organization, and electing its own officers, civil and military. The odious feudal customs, which had for centuries ground the common people into the dust, were universally abolished, and life and property were apparently as perfectly secured as with us at the present day. In his social capacity also the mechanic was as much respected, and his importance in the community as universally admitted.

But this state of things could not last, as it was in advance of the intelligence of the people, who, ignorant, and brutal, and turbulent, were always ripe for those contests of opposing factions, which ambitious demagogues were then, as now, continually on the watch to excite, and turn to their own account. Thus within the walls citizen was ever struggling against citizen, and party against party ; while without, city warred against city, and province against province, until a reâction again took place, and wearied with never-ending contention, the tired republics of Italy were glad to purchase tranquillity at the expense of liberty. In France, also, the result was the same, and the more reflecting citizens soon found that they had thrown off the yoke of their feudal lords, only to bend beneath another scarcely less oppressive, namely, the tyranny and cupidity of their own magistrates, sustained constantly by a large portion of the people, too ignorant to know their own rights, and too vicious to respect the rights of others. Under these circumstances, commune after commune petitioned the king to resume their charters, which he was always graciously pleased to do, and thus the mechanics of the cities sunk back into the social nothingness from which they had emerged. A blow however had been struck, from which the aristocracy never recovered ; and although mechanics lost their social position, they had gained immensely compared with their condition in former ages, by the increased security which was now given to the exercise of their professions, and also that the absolute personal slavery which was the cause of their original revolt, was done away for ever. In thus tacitly acknowledging themselves unfit for self government, they afford also the useful lesson, that intelligence

and virtue are the only sufficient pillars of a republic, and that although, for an instructed and moral people who can appreciate the blessing, a free constitution is unquestionably the best form of government, yet for an ignorant and vicious one, it is as unquestionably the worst.

Leaving this part of history, which, instructive as it is, does not so particularly interest us as that of our own ancestors, we shall confine ourselves for the present to the consideration of our subject as it relates to Great Britain.

The original inhabitants of our parent island, the ancient Britons, rude as history describes them, and torn continually by intestine wars, were yet not entirely barbarous. They had before the Roman invasion attained considerable proficiency in the working of metals, of bronze at least, of which their weapons and domestic implements were formed. This is proved not only by the evidence of history, but also by specimens which are occasionally discovered even at the present day. Their war chariots were formidable enough to throw the steel clad Romans frequently into confusion: they were no mean tacticians, their troops were regularly drawn up in battle, and many of their chiefs were capable of directing the movements of an army, and of forming the regular and systematic plan of a campaign. They had a sort of money composed of metal rings, so accurately balanced, that each of the larger is uniformly found to be exactly equal in weight to a certain number of the smaller. They understood the use of the mechanic powers, the lever at least, as is proved by the vast temples or pillared circles now remaining: immense stones are yet seen so perfectly balanced upon a pivot, that the strength of one man can move the weight of many tons.

One in Cornwall called Constantine Tolman, is an enormous mass of thirty-three feet in length, fourteen and a half deep, and eighteen and a half across. It is placed due east and west, resting upon two smaller stones, and its weight is computed at seven hundred and fifty tons. The removal of a mass like this by so rude a people is astonishing, and would severely try even the utmost resources of modern science.

The condition of the operative class, if there was one among them, did not differ probably from what it usually is among rude nations; and their domestic furniture, their habits and mode of living, presented no doubt, like those of all half civilized communities, a mixture of rudeness and barbaric decoration.

The Roman conquest came, however, and with it the arts and civilization of the conquerors; who, following out their wise policy of neither seeking to exterminate nor reduce to slavery the nations they conquered, soon covered the land with cities, and temples, and villas; magnificent roads, the vestiges of which remain to this day, extended in every direction. The blessings of christianity were in time introduced, and Roman Britain soon became a civilized, flourishing and happy country.

The colleges of operatives which have been before spoken of, were doubtless introduced there; but so deep is the silence of history evincing the tranquillity of Britain during the four hundred years of the Roman domination, and so entire seems to have been the resemblance between the Roman institutions there, and at home, that we find nothing to add to the brief notice already given.

Then came the Saxon invasion, sweeping over the land in a torrent of blood and fire, dissipating like a dream every vestige of christianity and the Roman civ-

ilization, and leaving behind it a long and dreary track of desolation, ignorance and misrule. But even this visitation, disastrous as it at first seemed for the cause of human improvement, and vast as was the amount of misery and suffering inflicted upon the conquered people, yet, says a modern writer, "that chaotic mass which then constituted society, contained the elements of modern European civilization; and in proportion to that very confusion, to the number and heterogeneous character of the component elements of that chaos, are the richness and completeness of the civilization which has been the result of them."

The free and wild barbarians, who, rushing from the forests of the north, in the sixth century, overthrew the Roman power, brought with them the germs of institutions which have in their developement proved themselves immeasurably superior to those which they superseded. Long before this event the ancient civilization had reached its culminating point; for centuries it had been declining, and in its decrepitude had entirely ceased to afford mankind the means of advancement. This apparent destruction then may be viewed as one of those awful lessons, by which Providence is ever instructing the human race, and should teach us that with nations as with individuals, adversity generates progress, and the greatest evils seem to give birth to the most important benefits.

Under the Saxon rule the people were divided into four classes. First, the class from which their kings were taken; for although their monarchs were to a certain degree elective, yet they were generally chosen from a particular family supposed to be descended from Odin, the great war god of the northern tribes. The second class were the nobility, or thanes: third the ceorls, who

were partially free, but bound to the land upon which they were born; and fourth, the theowes, or slaves, whose condition was one of absolute servitude. From the second of these classes, the ceorls, the great body of their operatives probably came; gradually winning for themselves additional privileges, until we shall find them under the Norman rule entirely emancipated, and making common cause with the aristocracy, against the first convulsive efforts for freedom which were made by the agricultural laborers.

Incorporations of trades or guilds existed among their operatives as in Roman times; and it will be interesting for us to know that one principal object of these guilds was to provide for "the honorable interment of deceased brethren. A fine paid in honey was inflicted upon any brother for non-attendance at the funeral, and the guild were to provide half the provisions for the funeral entertainment," at which, says the history, "all who were present gave two pence for alms. If a member died or fell sick out of his own district, the rest were to fetch him back, according to his will, under the same penalty."

We have evidence that in the Saxon period certain handicrafts had arrived at considerable perfection: English works in gold and silver were famous upon the Continent as early as the eighth century. Domestic industry was carefully inculcated, and females of the highest rank employed themselves in household avocations: the daughters of king Edward the elder did not disdain the labors of the distaff, the loom and the needle; and in the will of king Alfred, the female part of his family is designated as the spindle side.

The most able artificers were attached to the monasteries; and we find in their service, architects, illuminators of manuscripts, and workers in gold and silver, as

well as carpenters, smiths, masons, &c. "The process of tanning was well understood, and leather was much used as an article of clothing; the tanner himself worked up the material which he had prepared into shoes, hose, &c.; he made also a variety of articles which are now obtained from the saddle and harness maker. The crafts of the blacksmith and carpenter, at all times so important, were of course doubly prized in those rude times; and we learn that there were six smiths' forges in Gloucester, as early as the reign of Edward the Confessor, in the twelfth century. Iron was dug and melted, casting in brass and other metals was understood, and all those arts so necessary even to the appearance of civilization, were known and practiced among them, rudely to be sure, yet in sufficient perfection for their simple wants; although the dress, houses, and domestic accommodations of the people were still miserable in the extreme; and learning became so nearly extinguished, that when the Normans came in, but "very few of the English clergy could so much as read the church service; and if any one among them understood grammar, he was looked upon as a prodigy."

Commerce had before this sprung into being, and an ordinance of king Athelstan, in the second quarter of the tenth century, enacts that every merchant who shall have made three voyages over the sea with a ship and cargo of his own, shall have the rank of thane, or nobleman.

Slaves seem to have been at this period one of the chief articles of export, and the introduction of christianity into the country dates from the memorable fact, that the exposure of some beautiful Saxon children in the slave market at Rome, so excited the sympathy of Gregory, who afterwards became pope, that when this event gave

him the power, it was by his orders that Augustin, prior of St. Andrews, at Rome, undertook the mission to Britain, and the conversion of the whole Saxon nation was the result. This odious traffic however was deeply rooted in the national habits, and William of Malmesbury, who wrote nearly a century after the Norman conquest, declares that within his remembrance the people of Northumberland were in the habit of selling even their nearest relatives. A cotemporary writer states that in the town of Bristol, opposite to Ireland, the people were in the habit of buying men and women in all parts of England, and exporting them to Ireland for sale. "You might have seen with sorrow," says he, "long ranks of young persons of both sexes, and of the greatest beauty, tied together with ropes, and daily exposed for sale; nor were these men ashamed, O horrid wickedness! to give up their nearest relations, nay their own children, to slavery." The chronicle goes on to relate that after great pains, Saint Wulfstan succeeded in persuading these people to abandon "that wicked trade, and set an example to all the rest of England to do the same." "But for this remarkable passage," says a modern historian, "it would scarcely have been suspected that there ever was a time when the natives of England were regularly exported to be sold as slaves to the Irish."

The internal trade of Saxon England must have been very small; we infer this from the fact that no person was allowed to buy anything above the value of twenty pennies, except within a town and in presence of the chief magistrate, or of two or more witnesses. But notwithstanding all discouragements, the useful arts had doubtless improved under the Saxon monarchs; so slow however was their progress, that the last fifty years has unquestionably witnessed a far greater advance than

was achieved during the whole Saxon period of five centuries.

We owe therefore to our Saxon ancestors, no improvement in art, science or literature ; but we owe them, says a late history, " what is far better than any literary civilization ; the elementary forms at least of a system of political arrangements, founded upon larger and juster views of human rights and duties, of personal security, the rights of property, and individual happiness generally, than anything which antiquity had imagined."

The Norman conquest brought no amelioration to the condition of the common people ; on the contrary, the ceorls and the theowes of the Saxon times became the villains and serfs of the Norman ; and their privileges, if any they had, were at first extinguished under the crushing despotism of the monarchs, and the unchecked oppression of the nobles : still society advanced, for advancement is God's law, and man must bend to it.

The social condition of England under the Norman monarchs, is to our ideas a very strange one ; the extreme insecurity of person and property is the first fact which strikes us, and the preamble to the statute of Winchester, passed in the reign of Edward I. in 1285, avers that " murders, robberies and thefts be more used than they have been heretofore : " and many singular enactments follow for preserving the public peace. All persons were enjoined to provide themselves with arms, according to their condition, as set forth by the statute. In another clause it goes on to say, that " owing to the partiality of jurors, who would rather suffer strangers to be robbed, than have the offenders punished when they were of the same county with themselves, great difficulty was found in obtaining the conviction of felons." In consequence, it orders that the hundred, or parish,

shall be accountable for robberies done therein ; that the gates of all walled towns shall be shut from sunset to sunrise ; that no man shall lodge during the night in the suburbs of towns unless his host shall answer for him ; and that every stranger found in the streets between sunset and sunrise, shall be immediately taken up by the watch. Another ordinance passed in the reign of Edward III. avers, "that people do gather them together a great number of men at arms, and archers, and do ride in great routs in divers parts of England, and do take possession and set them in divers manors, lands, and other possessions, holding the same with force, &c., and in some places lying in wait with such routs do beat, and maim, and murder, and slay the people, for to have their goods, and the same retain to their own use," &c. So general was the demoralization here complained of, that a succeeding statute plainly accuses the nobles and great men of aiding and abetting these disorders, charging them with having made "alliances, confederacies, and conspiracies to maintain parties, pleas, and quarrels, whereby divers have been wrongfully disinherited, and some ransomed and destroyed, and some for fear to be maimed and beaten durst not sue for their right, nor complain, nor the jurors of inquests give their verdicts, to the great hurt of the people and slander of law and common right." A modern historian in treating of these disorders, says that "highway robbery was from the earliest times a sort of national crime : " and a judge of the same period, Sir John Fortescue, exults that more Englishmen were hanged in one year, than Frenchmen in seven ; and he declares that "if an Englishman be poor, and seeth another having riches which may be taken from him by might, he will not spare to do it !" Such were the "good old times of merry England ;" and we

shall find abundant cause as we proceed to thank Providence that our lot has fallen in better ones, bad as ours are.

A great revolution was going on during this period by the gradual conversion of the villains into free laborers, but we do not find that the artisans took any part in the matter; they were not in fact directly interested, having long enjoyed comparative freedom. History gives no distinct account of the manner in which this freedom was achieved, but it is certain that as early as the reign of Edward III. they were not considered bondsmen. The condition of the agricultural laborers was however still bad enough; and king Richard II. is represented as saying to the laborers of Kent, after the suppression of their rebellion in 1381: "Rustics ye have been and are, and in bondage shall ye still remain, not such as ye have heretofore known, but in a condition incomparably more vile." The house of commons, a few years after this, disgraced itself by a petition, (which to his credit the king rejected,) praying that for the honor of all the freemen in the kingdom, villains might not be allowed to put their children to school, in order to advance them by the church. From this time however we hear little of villainage, and it seems to have been allowed to sink silently into oblivion.

In the history of these times nothing seems to us more strange, than the continual restrictions upon trade, and the exercise of the handicraft professions. A curious instance of this is afforded by an ordinance of Henry III. in 1245, proclaiming a fair to be held at Westminster, and ordering all the traders of London to shut up their shops, and carry their goods to be sold there; also that all other fairs throughout England should be suspended during the fifteen days it was appointed to last.

"What made this interference to be felt as a greater hardship," says the history, "was that it rained excessively all the time, so that not only the goods were spoiled, but the dealers who were compelled to eat their victuals with their feet in the mud, and the wind and wet about their ears, suffered intolerably. Four years afterwards the king repeated the same piece of tyranny, and was seconded by the elements in a similar manner. This time too, scarcely any buyers came to the fair, so that no wonder the poor traders complained; but adds the history, the king did not mind the imprecations of the people."

Before the fiftieth year of Edward III. the mysteries or trades of London, which elected the common council of the city, were thirty-two in number; an ordinance of that year increased them to forty-eight, comprising most of the trades now in use, although many which were then important have since become obsolete. Most of the great city companies were incorporated during this century; many of them however had long subsisted as guilds or fraternities, but now obtained additional privileges. Their wealth, and consequently their influence, were always very great, and so much were they courted by the monarchs and nobility, that king Edward III. became a member of the fraternity of "linen armorers," a sort of tailors who made the padding and lining of armor; and in the succeeding reign there were four royal dukes, ten earls, ten barons, and five bishops, enrolled as honorary members of the Merchant Tailors' Company; so that the trades of London, says the history, "in all cases whenever the honor and dignity of the city were concerned, have always played a distinguished part."

In the early part of the Norman period, domestic ar-

chitecture was excessively rude, and the houses of the common people were constructed without regard to comfort or convenience. Some of them were built of mud, others of timber, none had glass windows, and very few had chimneys; but even in the better class of houses it was still the custom to build the fire against a *rere-dosse* in the hall, and the smoke found its way out how it could. As late even as the reign of Henry VII. the yeomanry are represented as dwelling in houses made of timber, having walls of wattled plaster. All their domestic arrangements were upon the same rude scale, and those common, every-day comforts and conveniences which are now within the reach of every one, however humble, were for centuries totally unknown. As an illustration of the wide difference between these times and our own, with respect to the value of things in common use, we find that in an account of the city of Colchester, in the reign of Edward III., the tools of a carpenter in that town are mentioned, with their value, namely, a broad axe, value five pence, another three pence, an adze two pence, a square one penny, a *navegor*, (probably a spoke-shave) one penny; making the total value of the whole exactly one shilling. The tools and stock of a blacksmith were estimated at twelve shillings; the stock in trade and household goods of a tanner at nine pounds seventeen shillings and ten pence; a mercer or dry goods dealer's stock at three pounds, and his household goods at two pounds nine shillings, or about twelve dollars — rather a slender provision, as we should consider it, to begin housekeeping with in our times.

The introduction of the art of printing into England, which took place under Edward the Fourth, in 1474, did not produce that immediate effect upon society which might be expected; the progress of the new

art was slow, most books of consequence were still multiplied by the tedious process of transcribing, and the operative classes knew not yet the victory which they had gained in the acquisition of a power which was in after times to operate as the right arm of freedom. Improvement in the demand for labor, the first step towards bettering the condition of the mechanic, had, however, become manifest; this is proved by the constant enactments to regulate wages, showing that their rate was increasing. These mistaken attempts to cramp the national industry happily did no great harm, and the body of the people steadily continued to advance in influence, and knowledge of their own strength. The circumstances of the times greatly favored this result; the ancient aristocracy had become so nearly extinct in the contests between the rival houses of York and Lancaster, that there were only twenty-eight temporal peers in the first parliament of Henry the Seventh, and but thirty-six in the first one of Henry the Eighth. The time-honored families, — “the massive pillars of feudalism,” — were therefore for the most part destroyed, or had lost their influence with their inheritance; an immense amount of property was thrown into new hands; the class of minor gentry and landholders was formed, comprising many individuals who had, by success in trade, or other good fortune, just emerged from the ranks of the populace; the aristocracy of wealth, which has lasted ever since, then began to give tokens of existence; the commonalty, who had suffered but slightly in those wars in comparison with the nobles, were gainers in every way; and we see in the legislature, by the increasing boldness which manifests itself at intervals in the popular branch, that they had not only begun to know their

rights, but had also a dawning consciousness of power to enforce them. The same absurdities in legislation however, still continued; sumptuary laws were then and for centuries after frequently enacted, to restrain extravagance in living, and to prevent the lower orders from imitating the dress of their superiors; but even these, show an evident improvement in the condition of the laborer. In 1444, the entire yearly allowance as fixed by law, for the clothing of an agricultural servant, was three shillings and fourpence; but, in 1463, only nineteen years after, it is enacted that the "clothing of all common laborers and artificers residing out of a city, and also their wives, should be of cloth not passing the price of two shillings the broad yard," or nearly two-thirds of the former allowance for a whole year!

It seems, also, by another clause in the statute, that they had become fond of ornament, since it prohibits any laborer or laborer's wife from wearing any girdle garnished with silver. A subsequent statute of 1482 permits the laborer to wear hose of the value of eighteen pence—a respectable sum in those days, and proving that the clothing of operatives was becoming better and better, notwithstanding the sumptuary laws.

This spirit of restriction and interference extended to all branches of industry, and even the learned professions did not escape. One of the most curious regulations in this respect, is a statute passed in the reign of Henry the Sixth, in 1455; and which was occasioned by the number of attorneys attending the king's courts in the city of Norwich, and the counties of Norfolk and Suffolk having risen from six or eight to ten times that number. "Under the former state of things," says the statute, "great tranquillity reigned

in the said city and counties, and little trouble or vexation was made by untrue or foreign suits; now, there are three or four score of attorneys, the greater part of whom have nothing to live on but the gains of their attorneyship, and also are not possessed with a proper knowledge of law; and they come to every market, fair, and other places where there is any assembly of people, exhorting, procuring, moving, and exciting the people to attempt untrue and foreign suits for small trespasses, little offences, and small sums of debt." The statute provides a summary remedy for the grievance, by enacting that there shall be but six common attorneys in Norfolk, six in Suffolk, and two in the city of Norwich; which enactment was carried into immediate effect, and is said to have done a great deal of good.

The reign of Henry the Seventh was throughout a triumph of petty rascality. "The chief part of his kingcraft," says a modern writer, "consists in his dexterity in plundering his subjects:" his exactions however, were strictly legal so far as the letter of the law was concerned, and the people had at least the consolation of knowing that their blood was sucked according to the most approved forms and precedents. Henry's first minister, Archbishop Morton, was worthy of his master; and a principle which he laid down, in his instructions to the commissioners appointed to collect one of the king's "benevolences," as they were oddly enough termed, would have immortalized him as a modern financier: "Both those who live sparingly and those who live splendidly," he tells them, "must be made to pay well, since the former ought to be able to afford the money from their savings, the latter by retrenching their expenditure."

This whole reign, in fact, was a worthy prelude to the next; and for the character of the then reigning monarch I shall quote the words of a late English historian.

"The temper," says the history, "of such a legislator as Henry the Eighth, and the thorough subservience, the otherwise incredible cowardice and baseness, of his parliaments, can only be fully exhibited by an enumeration of their penal laws, which, for number, variety, severity, and inconsistency, are perhaps unequalled in the annals of jurisprudence. Instead of the calmness, the foresight, the wisdom, which are looked for in a legislator, we find the wild phantasies, and ever-changing though ever-selfish caprices of a spoiled child, joined to the blind, fierce, malignant passions of a brutal and cruel savage. It would seem as if the disembodied demon of a Caligula, or a Nero, — the evil spirit that once wore their human form, — had again become incarnate upon earth, let loose by the Omnipotent for some wise, though to dull mortal eyes dimly-discerned end, to repeat in a distant age, and another clime, that strange, wild, extravagant medley of buffoonery and horror, which is fitted to move at once the laughter and execration of mankind."

Under the sway of a monarch like this, nothing is to be hoped for the operative; and if we judged merely by appearances we should infer that his social position had retrograded: but, so far from this, the industrious classes were in reality making more rapid progress towards emancipation amid the despotism of this reign, than ever before; and were silently imbibing those influences which, ever becoming stronger with the increasing light of knowledge, were destined in

after times to change the face of the English government.

The reign of Elizabeth, though less sensual and brutal than that of her father, was quite as tyrannical: the people, although we can trace an evident improvement in their condition, were still depressed; and the parliament were her willing slaves. There is an almost impious strain of adulation running through their addresses, which sometimes leads us to suspect that they were playing with her well-known weakness in this respect, and "fooling her to the top of her bent." On one occasion, when the queen had annulled certain obnoxious monopolies, the history declares that "the gratitude of the commons for her message announcing this, was as if they had been returning thanks for some mighty interposition of Heaven: indeed, they declared the message to be nothing less than a gospel; like the Divinity, she was all truth, and like him, too, she performed all she promised." I notice this fact, not that it has any direct bearing upon our subject, but as an illustration of the modes of thinking then prevalent, and of the depth of degradation to which flattery and obsequiousness were content to descend.

The amount of human life sacrificed in these times, under the forms of law, is absolutely frightful; seventy-two thousand persons were hanged for various offences during the single reign of Henry the Eighth. And there was no great improvement under Elizabeth, since the reports of the magistrates record that forty persons were hanged, during the year 1596, in one county alone, besides thirty-five burnt in the hand, and thirty-seven whipped; one hundred and eighty-three others apprehended for robberies, thefts, and other felonies, were discharged, though most of them were probably

as bad as the others ; and this was a fair sample of the remaining counties.

There were, also, in every county, three or four hundred able-bodied vagrants who lived by rapine, and who sometimes gathered in bands of fifty or sixty, robbing and plundering at will, and, by their numbers, so intimidating the magistrates and peaceable inhabitants, that they durst not attempt to enforce the laws against them. This dreadful state of society strongly illustrates the error of allowing the mere external brilliancy of the Elizabethan age to blind us to its true character, and proves, as has already been said, that what are called the good old times, have enjoyed a much better character than they deserved.

The gradual rise of trade and manufactures, which had been going on since Edward the Third, in 1331, invited over the first weavers of fine woollens from the Netherlands, still continued to operate as a constantly increasing stimulus to the national industry : labor, ingenuity and skill, began to be properly estimated and better rewarded ; but the curse of inferiority, which barbarian ignorance had stamped upon useful industry, yet existed, and all men in trade, even the mercantile classes, were obliged in Scotland, to wear a distinctive dress, from which bright colors, and ornamental decorations, were excluded. This, however, like all errors, gradually faded away before the ever-advancing light of intelligence ; and when the reformation threw its weight into the popular scale, by breaking down that blind reverence for antiquity and its usages under which oppressions and abuses best grow and strengthen, — and when, still more, it threw into the ranks of the people a large body of productive laborers, whose peculiar position under the ancient system had naturally

opposed them to every thing like speculation or enterprise, — it found the English nation better prepared to appreciate such an accession to its proper force than ever before; and an impetus was thereby given to the popular movement, that, notwithstanding the increased strength which the crown had apparently acquired by the destruction of the church, and by the quiet acquiescence of the nation in the despotism of Henry the Eighth, — notwithstanding the masculine vigor with which Elizabeth held the sceptre, — yet, under her successor, men began to hear the distant mutterings of that tempest which, in the days of Charles the First, prostrated the ancient institutions, and buried the monarch under the ruins of the monarchy.

Under the long parliament, the democratic principle achieved its final triumph; the right of all classes in the nation to a voice in the government was fully recognized, and from this admission the operative body may date its political emancipation, — that is, so far as it ever can be emancipated, under the social order which now prevails in England. The previous period was marked as has been said, by the rise of the middling class of gentry, and small landholders, which operated as a countervailing power against oppression, either aristocratic, or regal; and thereby so much was gained for the cause of liberty: but as to the operative classes, it may well be doubted whether notwithstanding their political advancement, they had not on the whole, rather receded in the scale of comfort.

It is certain that although the rate of wages had more than doubled during the sixteenth century, the necessaries of life had advanced in more than the same proportion; the laborer therefore, could not purchase so liberally as before; and this disproportion between

the rates of labor and the comforts which labor ought to secure, has in the opinion of many writers, gone on increasing from that day to this.

The contest which raged between Charles the First and his people did not arise from any national distress ; on the contrary, the condition of the laboring classes was no worse than usual, and the trading community, together with the middle classes generally, were decidedly more prosperous than ever before ; this contest, therefore, was one of principle, growing out of the collision of two antagonist ideas, namely, the divine right of kings against the divine right of the people — a contest for which the events of centuries had been silently preparing the way, and which no human prudence, or foresight, could have prevented from finally taking place.

During the whole course of the war, however, the due execution of the laws was for the most part maintained, and the general trade of the country carried on ; so that there was but little distress, except, of course, at the actual points where the war was raging ; and the national industry therefore, sprung forward with elastic force, the moment the contest terminated.

The revocation of the edict of Nantz, in 1685, gave England, at the expense of France, a large accession of productive labor ; thousands of artisans were, by this ill-judged act, compelled to take refuge in the former country, bringing with them many new branches of industry, particularly the silk manufacture, where their ingenuity, skill, and taste, were at once seen in the superior fabrics which the looms of England immediately sent forth. The manufacture of fine paper, also, for which England had always been tributary to the Continent, was introduced at this time, and probably by the same means.

In following out our plan of illustrating the condition of the operative by notices of the manners and modes of thinking in various periods, we are struck with the fact that up to the seventeenth century, however his legal, or political position may have improved, his social one remained much the same as in former ages; even some of the clergy, in the times of the Stuarts, spoke of the people on a certain occasion under the epithets of "rude rascal commons, rascal rioters, rascal rabble, that underfoot of people," and the like, "forgetting," says the history, "that they had souls to be saved, much more that they were formed in the image of their Maker as well as their betters." The aristocracy still looked down upon all traffickers and operatives as inferior beings, and treated them accordingly. "Even the fashionable comedy of the day was always spiced with scurrilous abuse of the operative classes;" and "one of its most racy incidents was generally the introduction of some vulgar flat-capped citizen to be robbed of his wealth, and outraged in the honor of his family, by some profligate adventurer of the court."

The London shops of this period, traders' as well as mechanics', were scarce better than cellars, or little booths, for the most part without doors or windows; and the master walked before them rehearsing a list of his merchandise, and plying for customers.

The apprentices formed a distinct and peculiar class, and seem to have been considered the "chief civic nuisances of the sixteenth and seventeenth centuries. These youths," says the history, "although scattered over the whole metropolis, were formidable not only from their numbers, but their union, and were always ready to head the minor insurrections of the period. In these cases, it was in vain for the city guard to op-

pose them; their clubs, bills, and partisans were swept before the fury of a prentice onset, and it was often necessary to call out the military against them. One aggrieved member of the fraternity was enough to throw the whole ward into an uproar; he had only to shout the war-cry of 'Prentices! clubs!' when every shop, warehouse, and street repeated the warning, and every prentice snatched up his cap and club and rushed to the rescue. These turbulent lads had also their feuds against certain other bodies, among which the law students of the Temple were particularly distinguished; but all foreigners they especially hated with even more than an English hatred."

Defoe gives rather an unfavorable picture of the improvidence and dissipation of the working classes in his day. "Good husbandry," says he, "is no English virtue; it may have been brought over; and in some places where it has been planted it has thriven well enough; but it is a foreign species; it neither loves nor is beloved by an Englishman. The English get estates, and the Dutch save them; and this observation I have made between foreigners and Englishmen—that where an Englishman earns twenty shillings a week and but just lives, as we call it, a Dutchman grows rich and leaves his children in very good condition. Where an English laboring man, with his nine shillings per week, lives wretchedly and poor, a Dutchman with that wages will live tolerably well, keep the wolf from the door, and have every thing handsome about him. In short, he will be rich with the same gain that makes the Englishman poor; he'll thrive where the other goes in rags, and he'll live where the other starves or goes a begging. We are the most *lazy diligent* nation in the world; there is nothing more fre-

quent than for an Englishman to work till he has got his pocket full of money, and then go and be idle, or perhaps drunk, till it is all gone, and perhaps himself in debt; and ask him in his cups what he intends, he'll tell you honestly he'll drink as long as it lasts, and then go to work for more." What an amount of misery and wasted means have we the history of in these few lines! and how much cause for thankfulness have we, my friends, that, through the exertions of a few noble spirits, we may reasonably hope to be spared from the further realization of the picture in our own country. But to return to our subject.

"It is amusing," continues the history, "to observe the jealous distinctions that still prevailed among the different classes: only a great magnifico, or royal merchant, was worthy to prefix Master or Mr. to his name; and if he was addressed as the worshipful Master so and so, it was when a soothing compliment was necessary; but the additions of Gentleman or Esquire would have thrown the whole court into a ferment. Even in such a trifling matter as a light in the dark streets at night, the same distinctions were observed; the courtiers were lighted with torches, merchants and lawyers with links, or large candles, and mechanics with lanterns."

Notwithstanding these follies, and although the condition of the operatives, or immediate laborers, remained without improvement, the national industry of Great Britain had begun in the beginning of the eighteenth century to show the dim outlines of its present gigantic form: yet the manufactures of that period were, from the absence of machinery, carried on under disadvantages of which we at present can form no idea. The steam engine had indeed been in use partially, since

1698, but Watt did not commence those experiments which fitted it for universal application till 1763, and it was not perfected, or extensively applied to machinery, till many years after. Spinning — to instance one branch of manufacture — in the early part of this century, was still done entirely by hand; and as an active weaver could keep three spinners in constant employ, he was therefore obliged to visit them frequently and urge them to exertion by extra wages, that he might complete the order of the wholesale dealer in time: in the woollen manufacture too, we are told that “some clothiers employed five hundred persons, who were not all collected in a factory, many of them carrying on their particular process of the manufacture under their own roofs. The weaver received materials from the clothier, and when he brought back his cloth, it was given to workmen engaged in another branch, and thus it passed through various hands till it was completed; the clothier being the capitalist who supplied the raw material, and sold the manufactured commodity.” It will at once be seen, that a system like this must necessarily be driven into improvement by the pressure of demand, which soon outran any possibility of supply; and this cause undoubtedly forced into being that wonderful series of machinery in all departments, which has since so completely changed the face of the manufacturing world.

From this period, there is nothing in the history of England particularly interesting to us as American mechanics; no new principles have been developed there — the various classes have kept the same relative social position, and the mechanic therefore remains as he was. To be sure the operation of christian principles has brought improved political institutions, and the prince and peasant are equal in the eye of the law; but what

avails all this to the destitute and ignorant myriads who throng England's factories or toil in her mines?—What avails it that they are surrounded by all the splendors of intellect, if their hard fate forbids one ray to reach their darkened minds? The lights of science, yea, and the blessings of liberty, are to them as though they had never been; alternating between half paid labor and the degradation of the poor house, they struggle on through life, until worn out with fruitless toil they sink into the grave, with the bitter reflection that their children, and their children's children, are destined to the same mournful inheritance.

In leaving this sad picture to speak of our own country, I would premise, that any thing like a detailed history of the productive arts, as they have existed here, is quite beyond the limits as well as the intention of this address. I shall, therefore, confine myself to the brief notice of a few prominent facts, and to the reflections, which they will naturally suggest.

Before the revolution, the condition and business prospects of mechanics were exceedingly precarious, as an act of parliament might totally interdict many handicraft professions, and thereby greatly cramp the exercise of all the rest. It is, perhaps, not generally supposed, that these professions were any more restricted then than now : we are apt to imagine, from their perfect freedom at present, that they have always been equally free : this, however, is a great mistake. The interdictory power was exercised more than once. For instance, by an act of the fifth year of George II, in 1732, the colonies were prohibited from exporting hats even from one colony to another, so that a hat made in Boston could not be sold in New-Hampshire or Connecticut; and this grievance was felt the more severely,

as they could, from the great plenty and cheapness of furs in those days, be manufactured much cheaper and better than in England; also because we had been in the habit of exporting them in large quantities, and at considerable profit, to many parts of Spain, Portugal, and the West Indies. But the act did not stop here: by another clause, no man who had not served a regular apprenticeship, was allowed to make a hat even for his own use; and no hatter was allowed to take more than two apprentices, nor those for less than seven years. Indeed the house of commons had previously, in 1719, expressly declared, that the introduction of manufactures into the colonies tended to lessen their dependence on Great Britain, and after the iron manufacture had sprung up amongst us, they had voted, in 1728, under pretence of encouraging the importation of American naval stores, that none in the plantations should manufacture iron wares of any kind whatever, to which the house of peers added a prohibition of every forge going by water for the making of bar or rod iron. In 1732, this manufacture had become so important, that there were in Massachusetts alone six furnaces and nineteen forges for the smelting of iron, and they fabricated all sorts of iron work for ships. In 1750, however, parliament enacted, that "no mill or other engine for slitting or rolling of iron, or any platting forge to work with a tilt hammer, or any furnace for making steel shall be erected or after such erection, continued, in any of his majesty's colonies in America."

This course of restriction continued to be the avowed policy of Great Britain up to the period of the revolution, and it was openly said in parliament, that America "must not be allowed to manufacture so much as a hob nail." It is evident from all this, that even the more indis-

pensable of the mechanic arts, though permitted, were not encouraged under the colonial governments, and that productive industry, although some branches thereof might have enjoyed toleration, could never have looked for prosperity.

After the revolution, a new day dawned upon our country; every thing was unrestricted, and every branch of labor — agriculture, commerce, manufactures, the mechanic arts — all felt the genial influence of freedom, and shot forth into new luxuriance. Their progress ever since has resembled rather a creation than a natural increase. The mechanical genius of our countrymen has proved itself able to grapple with every emergency, and while we have in some instances returned to Europe her own inventions, doubled in power and utility by American skill, we can point to the thousand evidences which cover our land, that the higher gift of invention, the creative power, has not been withheld from us.

Of the condition of the mechanic himself, under our republic, we have very little to say: his standing is well known, and affords little matter for comment. The very comfort and security which surround him take away from his position every particle of romance, and we can only say, that here he lives, and labors, and prospers, dwelling under his own vine and his own fig tree, with none to molest or make him afraid — until he tranquilly enters the house appointed for all the living, knowing that those who come after him will pass through life protected by the same institutions which have given him security, contentment, and peace.

We have thus traced the mechanic, loaded but too often with the burden of his unrequited toils, through community after community, always laboring, producing, sustaining, yet for the most part despised, or at best

neglected, by that society to which his exertions have continually been as the very life blood, and vital breath, and without which those miracles of intellect and art, which have shone like stars along the dark pathway of human destiny, dazzling the nations with their radiance, and throwing into the shade his own humbler lot, would either never have existed, or have shed their light in vain. And if it be asked, why has he been thus neglected and despised, why this feeling of avowed contempt or haughty condescension, on the part of the more favored classes, and of depression and hopeless inferiority on his own, has, under various modifications, endured even to the present day, not only in those countries whose social order encloses aristocratic indolence with a barrier over which useful industry may not pass — but in our own land ; if it be asked, why does some tinge of those feelings yet linger here ? I answer, that the principle upon which the original idea of the operative's inferiority was founded, is yet partially recognized here, and must be till he himself, by his own advancement, does it away. The principle, I think, was this ; that intellectual labor, having always and justly claimed the chief homage of civilized man as the main source of human improvement, the mechanic arts were therefore contemned, on the understanding that their exercise required mere manual dexterity, calling the intellect but little if at all into use ; and that therefore the mechanic, though certainly useful as performing a vast amount of disagreeable labor, was yet merely a superior kind of laboring animal — unfitted by his ignorance, still more by his rudeness and want of courtesy, for the society of the refined and intellectual, and who might look to be well fed and taken care of, certainly, but nothing more. That this was once the universal feeling has been demonstrated in the

historic gleanings which formed the first part of this address; but as he improved with the improving society, and was born, as it were, into the intellectual world; he gradually vindicated his claims to higher and higher consideration, as his means of access to the sources of mental light became more and more extended, until, in Great Britain and some other countries of Europe, he has finally, as has been shown, achieved apparent political emancipation. Here, thank God, he had no combat to sustain, for his political rights were never denied; but even here, the day of his complete social emancipation is not yet.

I do not mean by this to echo the common cant of aristocratic exclusiveness and intolerance, but simply to state a fact, which is a natural consequence of things, and for which nobody is to blame. I beg my brethren then to remember, that our place in the social scale has, at any given period of history, been precisely that which our intellectual advancement entitled us to fill: no higher, of course, and no lower. This I believe to be the truth, and to illustrate this truth, as an all-important principle, has been one main purpose of what I have said this day. Let us not quarrel then with our social position, since it always has been precisely what we have made it ourselves, and always will be.

What would the half savage hordes who constituted the operative class of the ancient world have done with freedom, with social equality? What would they have done with it in the middle ages? What would our rude ancestors, British, Saxon or Norman, have done with it? Had the mechanic of the seventeenth or eighteenth centuries made himself worthy of it? And alas, my friends, is any great portion of our fraternity the world over prepared for it even now? But I need pursue this train of

thought no further ; your own reflections will carry it out better than my words. Improvement then should be our aim ; improvement in its largest sense ; religious, moral, and intellectual. You need not trouble yourselves about political, for that will follow in the train of the others, and all the powers of evil can neither prevent nor retard it. Forget not, however, that the work-shop and the plough have no right to engross our whole attention ; the wants of the body are, in our country, easily supplied ; let each of us remember then that he has affections and sympathies to be cherished and improved, an intellect to be cultivated, a soul to be saved : remember that the operative is to win for himself social as well as political equality ; let him qualify himself then for this accomplishment of his destiny, not only by the moral and intellectual improvement which will secure it, but also by that courtesy of manners which alone will render his position when gained a graceful and an easy one.

He is told of his political power, that he holds in his hands the destinies of this people, and it is true : he stands then before his God intrusted with solemn responsibilities — let him feel their full weight : let him determine to do his part, and do it manfully, towards the dissemination of light and knowledge, as he may find opportunity : let him turn away from all appeals to his passions under pretence of furthering his political rights — remembering that there is neither satisfaction nor improvement in hatred, envy, malice, or uncharitableness ; but ever cultivating the spirit of brotherly kindness towards all men ; let him wait in humble hope for that promised day when all injustice shall cease, and when enlightened christian philanthropy shall extend the kingdom of peace, and good will, and benevolence, through-

out all lands, from the rising even unto the setting sun.

And, brethren of the Mechanic Association, we have also as members of that body our peculiar duties. Let us inquire then, what we have done towards "promoting good offices and fellowship, assisting the necessitous, encouraging the ingenious, or rewarding fidelity?" And we can truly say we have done something; but let us not think we have done all. Do we give in charity so much as we might? Is there not a large class of cases, families who have seen better days, now suffering in silent misery, but whose delicacy forbids them to ask that relief which we are so able, and I trust so willing, to bestow? Does not every member recollect some such? And should not our committee then be instructed to seek them out, and minister to their necessities from our abundance? Again: have we done our utmost to promote good offices and fellowship? Are our members acquainted with each other? Do they take an interest in each other? And if they do not, from the want of facilities for communing together, how shall we remedy the evil? We have spoken of erecting a building which should contain a library and reading rooms; also, halls for exhibition and lectures: If this is practicable, we should all rejoice, I know, to see it done; but if it is impracticable, there is one thing which we can do. We have abundant funds for commencing the purchase of a library, and to open reading and conversation rooms in a hired building: this we ought to do, and until we have in this way given our members an opportunity of becoming acquainted with each other, we cannot say that we have done our utmost towards promoting good offices and fellowship. We have instituted fairs for encouraging the ingenious, and a great improve-

ment in the productions of manufacturing and mechanic skill has been the result. There seems, however, to be a general misconception both on the part of members and others, as to the principle upon which contributions should be sent. We must not lose sight of the fact, that these exhibitions are intended for the encouragement and improvement of the productive arts, and not for the immediate pecuniary benefit of individuals. Individuals certainly reap their share of the advantage accruing to the public from the general advance which is the consequence; but every mechanic will, I trust, have public spirit enough to come forward and sustain our fairs for the future, heartily and cheerfully — not with the sordid hope of immediate profit, but from a conviction of their importance to our country: it being obvious, that when the results of productive labor are, at stated times, brought together and exhibited for public inspection, giving each individual an opportunity of comparing what he has done with what has been done by all others, an enlightened and generous competition must ensue, bringing with it the greatest advantages to the national industry.

To reward fidelity is another purpose of our Association; and here too we have done something. We give to the faithful apprentice, at the expiration of his term of service, an honorary diploma, setting forth his claims to encouragement, as honest and trustworthy; and this is well; but so important do I consider the relation of master and apprentice, not only to individuals, but to the community — and when, also, I consider the fact that this Association, now numbering nearly a thousand members, is continually sending forth into the world hundreds of young men, active, hardy, and enterprising; ready to give a tone to society, for good or for evil, ac-

cordova to the influences of their apprenticeship — I feel that our responsibility is very great, and that we are bound to leave nothing untried which may even by possibility improve those influences; since upon them the character of this powerful body of our future citizens constantly depends.

Why can we not then give some honorary token to the apprentice, when he shall have faithfully passed through a certain portion of his time? A medal for instance, to be presented publicly by the authorities of the Association, either at the annual meeting, or on some other occasion, as may be preferred. I do not mean that this shall be awarded to superior skill, for I believe the moral effect of premiums awarded on that principle to be decidedly bad; generating feelings of pride and self sufficiency in the apprentice which are certain to destroy his usefulness. I propose, therefore, that these honorary tokens shall be the reward of morality, industry, and fidelity, thereby, as I think, doing away with every important objection to them, and securing their operation as an efficient and continued incentive to good conduct.

MY BRETHREN :

I have now completed my task. I have endeavored to set before you, as mechanics generally, and also as members of this Association, some principles which I consider of sufficient importance to be constantly kept in mind. There is no novelty in these views, I am aware; but as I have already said, I believe them to be true, and truth does not suffer by frequent repetition. If what I have said then may cause a single individual to look into the purposes of his creation, and form the resolution to be no longer a creature of mere conventional usages, but a true man, daring to live as such,

without putting his trust in those decencies which society is so apt to dignify with the name of virtues ; not following the lead of others, but thinking and acting for himself, honestly and independently, and above all seeking the favor of God, rather than the favor of man — if I may have the hope of this, I shall feel that, although imperfectly, I have yet spoken not altogether in vain.

And in conclusion, brethren, what shall we say of our present condition, but that truly the Lord has been very good unto us ? He has cast our lot in a goodly land, in a goodly city. He has blessed us in our outgoings and our incomings. He has turned away the storm of war from our borders, and the mild radiance of peace illumines and blesses our land. He has spared our homes from the wasting pestilence, and the full garners of the husbandman bear witness to his goodness and loving kindness. He has given to labor its reward, and the song of content is again beginning to be heard in the abodes of industry. Let us then rejoice and be glad — let our full hearts be lifted up in gratitude to the Author of all good, and while in deep humiliation for individual and national imperfection we rest on his mercy, let us in devout gratitude for the past, and humble confidence in the future pursue our allotted path, willing and anxious to do all that in us lies to carry forward the great work of human improvement : and having always in view the true end of our being, let us be ever ready to echo the glorious annunciation which ushered in the light of Christianity :

PEACE ON EARTH — GOOD WILL TO MAN !

APPENDIX.

ORDER OF EXERCISES

At the Twelfth Triennial Festival of the
MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION,

AT THE MELODEON, OCTOBER 6, 1842.

I.

VOLUNTARY ON THE ORGAN.

II.

ANTHEM

Now elevate the sign of Judah, now elevate the banner, call it forth in Zion. O desert us not, O Lord; thou art always gracious unto thy servants; thou art our God, O Lord of hosts; So we will praise thee, O God and Lord of Hosts. Amen.

III.

LESSONS FROM SCRIPTURE.

IV.

PRAYER — By Rev. J. T. I. COOLIDGE.

V.

HYMN.

My soul, praise the Lord,
Speak good of his name,
His mercies record,
His bounties proclaim:

To God, their Creator,
 Let all creatures raise
 The song of thanksgiving,
 The chorus of praise !

Though, hid from man's sight,
 God sits on his throne,
 Yet here by his works
 Their Author is known :
 The world shines a mirror
 Its Maker to show,
 And heaven views its image
 Reflected below.

By knowledge supreme,
 By wisdom divine,
 God governs this earth
 With gracious design ;
 O'er beast, bird, and insect,
 His providence reigns,
 Whose will first created,
 Whose love still sustains.

And man, his last work,
 With reason endued,
 Who, falling through sin,
 By grace is renewed ;
 To God, his Creator,
 Let man ever raise
 The song of thanksgiving,
 The chorus of praise !

 VI.

ADDRESS — By Mr. GEORGE G. SMITH,
 MEMBER OF THE ASSOCIATION.

VII.

ART — AN ODE.

Written by Charles Sprague, Esq. for the Mechanics' Celebration, in 1824.

WHEN, from the sacred garden driven,
 Man fled before his Maker's wrath,
 An Angel left her place in heaven,
 And crossed the wanderer's sunless path.
 'T was Art ! sweet Art ! new radiance broke
 Where her light foot flew o'er the ground,
 And thus with seraph voice she spoke :
 " The Curse a Blessing shall be found."

She led him through the trackless wild,
 Where noontide sunbeam never blazed ;
 The thistle shrunk, the harvest smiled,
 And Nature gladdened as she gazed.
 Earth's thousand tribes of living things,
 At Art's command, to him are given ;
 The village grows, the city springs,
 And point their spires of faith to heaven.

He rends the oak — and bids it ride,
 To guard the shores its beauty graced ;
 He smites the rock — upheaved in pride,
 See towers of strength, and domes of taste.
 Earth's teeming caves their wealth reveal,
 Fire bears his banner on the wave,
 He bids the mortal poison heal,
 And leaps triumphant o'er the grave.

He plucks the pearls that stud the deep,
 Admiring Beauty's lap to fill ;
 He breaks the stubborn marble's sleep,
 And mocks his own Creator's skill.
 With thoughts that swell his glowing soul,
 He bids the ore illumine the page,
 And proudly scorning Time's control,
 Commerces* with an unborn age.

In fields of air he writes his name,
 And treads the chambers of the sky ;
 He reads the stars, and grasps the flame
 That quivers round the throne on high.
 In war renowned, in peace sublime,
 He moves in greatness and in grace ;
 His power, subduing space and time,
 Links realm to realm, and race to race.

VIII.
 BENEDICTION.

**Note by the Printer.*—We have so often seen this word misprinted — “commences,” for *commerces* — that we consider it due to the accomplished author of the Poem, than which we know of no one more beautiful in the English language, to state the fact.

THE DINNER.

After the public services at the Melodeon, the association, with its guests, went in procession to Faneuil Hall, where a dinner was provided by Mr. Taft, of the Cornhill coffee-house. Charles G. Greene officiated as chief marshal on the occasion. Joseph Lewis, president of the association, presided at the table. The chief marshal announced the regular sentiments, many of which were responded to by the guests and members. The following songs, written for this celebration, were sung at the table :

THE TRIUMPHS OF LABOR.

Written by John H. Warland, Esq. and sung by Mr. Bartlett.

STOUT Hearts ! who guard the starry banner,
That streams our glorious Union o'er —
Bold Spirits ! raise your loud hosanna
To LABOR'S TRIUMPHS on sea and shore !
Say ! shall the Hero's deeds of glory,
His blood-stained spirit wed to Fame —
And the victories of Peace your name
Enshrine not in the heart of story ?
No ! no ! Press on, true men !
Who make the earth smile bright
With Labor's magic arm and wand —
The broad world feels your might.

Nature's Noblemen ! whose honor bright
Is the best guardian of your fame !
What sceptred fool, with proud birth-right,
Can match ye in your deeds or name ?
YOUR sceptre — your true arm uplifted
To fell the oak that builds HIS throne —
Your empire — Nature's broad realm alone,
Your law your own strong minds, high-gifted.
Press on ! Press on ! &c.

The pine-tree, from the forest springing,
Walks old ocean like a " thing of life " —

The giant oaks, with loud crash ringing,
 Ride the surges of the battle-strife ;
 And every tree, rock, and buried mine
 Leaps from the earth beneath your spell —
 The palace, and where your treasures dwell,
 Sweet Labor's hard-earned garlands twine.
 Press on ! Press on ! &c.

The loom comes forth — the bright lights kindle —
 And the music of the dashing stream
 Singeth your praise — the busy spindle,
 With cunning hand, weaves it for the beam.
 " God's first Temples," all art excelling,
 Your touch transforms, and decks with gold, —
 The poor man's palace, with hearts ne'er cold,
 And splendid misery's lordly dwelling.
 Press on ! Press on ! &c.

Bethink ye of that god-like spirit
 That nerves strong hands, and true hearts feeds !
 Ay — be the blood your sons inherit
 Ennobled but by noble deeds !
 Your Franklins and your Fultons, cherish !
 Explorers of the realms of mind :
 Earth's treasures ye may search and find,
 The mind's only cannot perish.
 Press on ! Press on ! &c.

Mild Charity is Labor's brightest
 Jewel, that decks her moistened brow —
 It sweetens Toil, and makes that lightest,
 Which but for it the aching head would bow ;
 The orphan's tear — can ye forget it ?
 The widow's prayer, oh ! will ye spurn ?
 From the TREASURE of your comrade turn ?
 Within your heart of hearts ye'll set it !
 Press on ! Press on ! &c.

Brave hearts who guard the starry banner
 That streams our glorious Union o'er,
 Well may ye raise your loud hosanna,
 For LABOR's triumphs on sea and shore :
 Boast Earth's mightiest none more splendid —
 Joint offspring of MIND, HEART and HAND ;
 The Builders of your own Fame ye stand :
 Your deeds with stainless glory blended !
 Press on ! Press on ! &c.

SONG,

Written for the occasion — and sung by Mr. Chapman of the Tremont Theatre.

—
 Good fellows all, both short and tall,
 I'll venture, right or wrong,
 To turn my patent rhyming mill,
 And grind a homespun song ;
 In former times, they went at rhymes,
 As oxen drag a team,
 But now-a-days, there 's nothing pays,
 Unless it goes by steam.
 With a Ri tol, &c.

Three years ago, as you all know,
 This festival we crown'd ;
 Old Time's a sturdy engineer,
 And makes the wheels go round ;
 Old Time's uncivil to us quite,
 The case is plain, because
 The rogue will never wait a jot,
 Although we like *huge paws*.

I guess we 've flattering prospects though,
 For 't is a settled point,
 Good workmen must be looking up,
 When times are *out of joint*.
 Some scraps of wisdom, sure they want,
 The Commonwealth to mend,
 And who but us have got *old saws*,
 Pat at the fingers' end ?

Let lawyers take a hint from us,
 Then we shall see great gain,
 When they chop off from crooked tricks,
 And take them to the *plane*.
 Some politicians too there are,
 Come half-way to our doors,
 They 're no great shakes in *augury*,
 Though most confounded *bores*.

And then those Congress journeymen,
 Who ever heard of *sick*
 A cobbling set, that wax their ends,
 But hardly sew a stitch ?
 I guess they make more noise than work,
 Confound their empty clacks !

But we're the lads can show 'em how
They ought to pass the *axe*.

The girls they love a workman, sure,
And think there's nothing finer,
Than going into partnership,
And sending for a *joiner* ;
The printer too, they don't despise,
For when they meet, I guess,
Their lips are set right up in *form*,
And quickly put to *press*.

So here 's all glory to our craft,
And widely may it spread,
And may we never fail to hit
The right nail on the head :
Hurrah for Yankee industry,
And all that ere *consarn* !
So now I 've spun my staple out,
I 'll wind up this long yarn.

The afternoon passed off in the most agreeable manner. Of the various speeches made, that of the venerable Benjamin Russell, who is now eighty years of age, and nearly as vigorous, mentally and physically, as he was forty years ago, is especially worth preserving, in a form less perishable than are the newspapers of the day. It is subjoined :

SPEECH OF MAJOR BENJAMIN RUSSELL.

In rising, Mr. President, in obedience to your call, you will believe one, who is under the painful impression that only seven of the original members of our association are now in the land of the living. Six are present ; but the seventh, I lament to say, is too infirm and debilitated to be here.

In our absent brother, Mr. President, we have had an associate, who, for more than half a century, gave us an example of mechanic punctuality, decorum, and interest, worthy of all acceptance. For more than forty years he was elected to the government of the association, where he was alike attentive and diligent — and permit the member who now addresses you to add, that from his personal knowledge, he can state that our absent associate was the first individual that proposed, and the first to call, the incipient mechanic meeting, at their old head-quarters, at the Green Dragon. The number which

met was small ; but from that little beginning has arisen the immense and useful, and therefore popular and respected, mechanic institution now before us. I well know, sir, that the deepest regret which an afflicted absent brother can feel, is that his body cannot be present where his honest heart and best wishes abide. In paying this humble tribute to my old friend, Henry Purkitt, I but discharge an incumbent duty, and am satisfied that it will be responded to by all, and there are very many, who know him.

Mr. President : — I well know that this vast and respectable assembly are convened in this temple of liberty, to celebrate a time-honored festivity, and I also feel, that no one who has a mechanic heart in his bosom, could desire to mar it in the least degree. But, sir, may it be in mechanic keeping, even in our utmost festivity, to devote a moment to a solemn reminiscence of the memories of the departed mechanics, to whose labors of love, devotion and perseverance, we are indebted, under the care of a kind Providence, for the great comforts and blessings which we this day so bountifully enjoy ? And sir, may it not be held to be the duty of one, the most aged of your associates, to solicit the devotion of a moment, to the consecration of a memorial of such departed worth ?

Although my hearing is defective, I can *feel* the affirmative response. I will then, Mr. President, with your permission, and that of my brother associates, offer the following as an oblation :

The sacred memory of Paul Revere, Jonathan Hunnewell, John Codman, Edward Tuckerman, Francis Wright, Samuel Gore, Edmund Hart, and Zachariah Hicks, original members, elected by their fellow associates during a long series of years to high and responsible offices of the association, meriting and receiving their highest confidence and unanimous thanks ; and now enjoying the blessed reward of faithful and successful services, in another and a better world.

You well know, Mr. President, that many more departed mechanic worthies, who have done honor to the offices to which they have been elected, and advanced the best interests of our association, might be added to the list. They cannot be forgotten, and will long live in grateful recollection. But the enumeration might take more time than can be allowed to one subject, however dear and interesting.

Still, Mr. President, I must ask your kind indulgence for another moment, to give utterance to my feelings in regard to our departed sires. Most of them enjoyed the blessing of health, in addition to long life. Some of them exceeded by many years the limit of sacred writ, in the enjoyment of numerous friends, and the comforts of life. Industry, improvement, and perseverance in their callings, were added to benevolence and true charity to their fellow citizens ;—their patriotism was in the tented field of war—in peace, the halls of legislation. They defended the liberties, and advanced the prosperity of the nation ; and steadily advocated, by their votes, if not by their speeches, the great principles of constitutional liberty, law, and order, which had been cradled in this consecrated hall, in which we now so peacefully and happily enjoy the fruits of their labor. In improving the mechanic arts and

manufactures ; in building, rigging, and arming our glorious navy, then in its infancy — Old Ironsides being especially their work ; and in the strong advocacy of the constitution, they did much to promote the glory, and advance the prosperity of their beloved country : and it is but justice to add, that in an eminent degree, their country cherished and honored them. May all who love their memories, imitate their virtues and labors, and like them, be entitled to be held in reverence and regard by all succeeding posterity.

There are now living only seven of the original members of the association, viz. : Benjamin Russell, Henry Purkitt, Daniel Messinger, James Phillips, Samuel Perkins, Peter Mackintosh, and Oliver Johonnot. These venerable members were invited *as guests*, and all of them were present at the festival, except Messrs. Purkitt and Johonnot, whose infirmities prevented their attendance. Mr. Mackintosh, who was present, and gave an appropriate sentiment, entered on that day upon the eighty-sixth year of his age.



OFFICERS OF THE ASSOCIATION. 1842.

JOSEPH LEWIS, *President.*

CHARLES A. WELLS, *Vice President.*

OSMYN BREWSTER, *Treasurer.*

HENRY W. DUTTON, *Secretary.*

TRUSTEES.

JOHN GORHAM ROGERS,

ENOCH H. SNELLING,

THOMAS HAVILAND,

JOHN G. ROBERTS,

HENRY N. HOOPER,

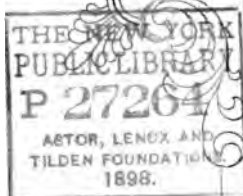
KIMBALL GIBSON,

HENRY K. HANCOCK,

ROLAND CUSHING,

RUEL BAKER.

AN
ADDRESS



DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

ON ITS

FIRST SEMI-CENTENNIAL ANNIVERSARY

AND

THIRTEENTH TRIENNIAL FESTIVAL,

October 2nd, 1845,

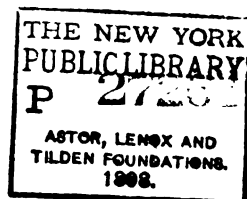
BY FREDERIC W. LINCOLN, JR.



BOSTON:

**PRINTED BY DUTTON AND WENTWORTH,
No. 37, CONGRESS STREET.**

1845.



AN

ADDRESS

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

ON ITS

FIRST SEMI-CENTENNIAL ANNIVERSARY

AND

THIRTEENTH TRIENNIAL FESTIVAL,

(October 2nd, 1845,)

BY FREDERIC W. LINCOLN, JR.

PUBLISHED BY ORDER OF THE ASSOCIATION.

BOSTON:

**PRINTED BY DUTTON AND WENTWORTH,
No. 37, CONGRESS STREET.**

1845.

P. 16

BOSTON, OCTOBER 11, 1845.

TO MR. F. W. LINCOLN, JR.

DEAR SIR,

At a meeting of our Association on the day of the Semi-Centennial Celebration, a vote, of which the undersigned have great pleasure in transmitting a copy, was unanimously passed; in the sentiments of which, permit us, as individuals, to declare our entire concurrence, and to add the expression of our earnest desire that you will grant the request therein contained.

We remain,

Very truly, your friends,

GEO. G. SMITH,
GEO. DARRACOTT, } Committee.
HENRY N. HOOVER, }

At a Meeting of the MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION, held OCTOBER 2nd, 1845, it was, on motion of GEORGE DARRACOTT, Esq., unanimously voted:

"That the thanks of this Association be presented to MR. F. W. LINCOLN, JR. for his most able and interesting Address delivered this day; and that the PRESIDENT, together with MESSRS. GEORGE DARRACOTT and HENRY N. HOOVER, be a Committee to inform him of this vote, and to request a copy of the Address for the press."

BOSTON, OCTOBER 15th, 1845.

GENTLEMEN,

The manuscript of the Address I had the honor to deliver before the Association, at their late Festival, is at your disposal. I have fears that its perusal will not sustain the kind regard which it received at the time of its delivery. The wishes of the Association, however, I do not feel at liberty to decline, and, with many thanks for their complimentary vote, and for the manner in which you have been pleased to convey it,

I subscribe myself,

Respectfully, Yours, &c.

FREDERIC W. LINCOLN, JR.

TO GEO. G. SMITH,
GEORGE DARRACOTT,
HENRY N. HOOVER, Esq's.



ADDRESS.

TIME flows on in its rapid and ceaseless course. Man can neither stay its progress, nor accelerate its speed. Now and then he leaves his footprints lingering upon the sand, "which seeing, we take heart again."

The custom of celebrating important events, of recalling to the mind the act which marks an era, of summoning the past to our companionship, and the present to its destiny, is wise and good ; it is respectful to the memory of the age that has gone, it inspires faith in that which is to come. The river to its fountain. The race to its founders. Let the robust vigor of manhood retrace its steps to the sweet innocence of infancy.

We have assembled, Mr. President, and Gentlemen of the Massachusetts Charitable Mechanic Association, to commemorate the fiftieth anniversary of its institution. The sober cares of our several daily avocations have been laid aside, that we may consult upon their public influence and usefulness. We have come together upon this, our Festival, to grasp each other by the hand, and to sit down to meat, at a common board. We hope to strengthen our sympathies, to brace anew the bands which make us one. A half century ! fifty years in their course have rolled on to the ocean of eternity, but we need no whining monody

upon their rapid flight. Every moment has been precious; but if, as it has passed, it has carried with it some deed of private beneficence or public spirit, the season should be one of joy and congratulation, and such be the emotions of the hour. Joy, not that the Association has survived, has lingered so long, but that it has lived so well, and accomplished so much, the tears of private worth that it has dried, as well as the energy of public virtue it has inspired, alike bear testimony that it has, in some degree, been faithful to its day and generation. I apprehend that but few are aware of the measure of its deeds, or the amount of good influence which it has silently shed abroad upon this community. In tracing the history of its proceedings, I have been sorely perplexed, which most to admire, the wisdom of its designs, or their glorious results. Nearly every page of its records bears witness, not only that something was attempted, but something actually done.

This occasion is a civil Festival; it is public and peculiar in its character; its morn, indeed, is not ushered in by the pealing of bells, nor is it announced in monosyllable tones from the cannon's mouth. No train-band of armed men marshal your procession through our streets, for such demonstrations would add neither to its dignity, nor its significance. The Mechanic Arts, whose beneficial results we this day memorialize, are the rich sources from which civilization and refinement spring. As mankind become enlightened, the victories of peace will be considered greater than those of war, the anniversary of a new invention, deserving of more remembrance than a bloody battle, and the first application of some power of nature to man's subjection, of more consequence than the conquest of rich provinces and walled cities. As the arts spread over the world, methinks I hear, as of old,

the song of the angels, "peace on earth, good will to man." That sweet strain of the heavenly minstrels floats over the nations which announced the advent of the Prince of Peace, our Savior and our Lord, but whose social position among men was that of the carpenter's son.

Gentlemen, custom and the proprieties of the occasion, place some one of your number in the post which I now occupy. Your Government has seen fit to select one of the youngest of your Association for the high honor. Under such circumstances, the themes of the speaker should be aspirations rather than experiences. Advice should come from those whose years give the weight of authority, whose interest in the subject is confirmed by long continued labor in its behalf, and whose social position and rank would confer honor upon the Association. Destitute of these requisites, not having arrived at that age when "discretion waits upon the judgment," pressed into the service by kindness, and a promise to be exonerated from the charge of presumption, the best thoughts, which the anticipation of the occasion has suggested, shall be laid before you, with the hope that you will pardon their weakness, in consideration of the motives that prompted them.

The world in which we live is a vast magazine, full of capabilities and powers, the development of which constitutes man's discipline and perfection;—in infancy, the most helpless of the creatures of the earth, yet he is destined to be its master and lord. According to the degree of growth to be attained, so is the period of time for its fulfilment. The mushroom springs up in a *night*, it takes *years* for the acorn to become the sturdy oak. The brute attains the full expansion of his powers in a few months, his progeny neither advance, nor improve.

To man's development is assigned the race, and generations are required for its accomplishment. The earth, with its hidden forces, and man, with his unrevealed powers, move onward in the course of centuries, gradually unfolding themselves, until the one shall become a paradise fitted for the other's highest enjoyment and happiness. The whole universe is latent with gifts; science discovers them, the mechanic embodies them in forms of beauty and convenience, and applies them to the well-being of the race. The history of the useful arts, is the history of civilized man; no nation of refinement could exist without them; their beginning was contemporary with the discovery of metals. The first worker in them, was the first mechanic. Iron, the most valuable in its uses, and the most universally diffused throughout the earth, was probably the first discovered.

The sacred record informs us, that the seventh regular descendant from our first parents, Tubal Cain, was "the instructor of every artificer of brass and iron." They were regarded with such esteem by the civilized nations of antiquity, that their mythology ascribed their introduction to the gods. One nation affirmed that there came down from Heaven, a plough, a yoke, an axe, and a goblet; and similar traditions prevailed among the most polished of the ancients. Saturn gave them to the aborigines of Italy. Virgil, in giving a description of their condition, says,

"Nor laws they knew, nor manners, nor the care
Of laboring oxen, nor the shining share,
Nor arts of gain, nor what they gained to spare;
Their exercise the chase: the running flood
Supplied their thirst; the trees supplied their food.
Then Saturn came, who fled the power of Jove,
Robbed of his realms, and banished from above,
The men dispersed on hills, to towns he brought,
And laws ordained, and civil customs taught."

As the primitive employment of man was the cultivation of the earth, his inventive powers must first have been called into action in fabricating rude instruments to aid him in his work. The farmer's, we consider the most original, as it is the most important of man's stated avocations, yet how scanty would be the harvest, if art did not furnish him the implements of his industry !

When man's physical wants are supplied, then he becomes conscious of those higher elements of his nature, to which he must minister to secure his greatest degree of happiness. As these become developed, he rises in the scale of being, and civilization is the result. Civilization adds nothing to his original powers ; it brings them into full play, and fills up their measure. The boast of our age is its civilization, but it is the product of generations of growth. The experience of six thousand years are embodied in our present social forms. Our mental ideas, as well as our physical comforts, the whole past has been preparing.

It might be of interest, to trace, step by step, the history of invention, and the necessary results which followed in its train ; but it is inexpedient, as it has been a favorite subject upon former occasions, and is, in itself, so expansive in its range, as to exclude other topics, equally pertinent to the time and place.

The mighty elements of nature seemed to have been made for instruments in man's hands to conduce to his happiness and welfare. He discovers their properties, and then puts them in harness, and tasks them day and night.

Water, apparently the least substantial form of matter, which we cannot even grasp with our fingers, when he

applies it to use, becomes one of the great engines of power in the universe. He says to the stream descending on its way to old ocean, "work your passage;" and he places a wheel in its course, and it labors for him with the strength of a thousand men. When he connects it with its opposite element, fire, it generates a new force, working wonders. Under its influence, we fly with the speed and precision of an arrow from one extremity of the continent to the other, and space, and time, seem to be under our control. The heaving ocean, apparently a barrier between the old world and the new, becomes the very highway and path of the nations. It bears upon his bosom his heaviest burdens, and he says to the winds sweeping over its surface, waft me on my course; or, in spite of the wind or the storm, he heats a little water, and his mandate is obeyed.

The lightning he attaches to the post office department, and the sun he engages as a portrait painter. That rotary motion, which is the great element of power of the universe, which holds the solar system in its course, he applies in all manner of forms; it is the principle of the wheel, in all its modifications, and is introduced in the last card press, and the latest invented washing machine. Apt was the answer of Bolton, the partner of Watt, in his interview with George III, who asked him what he sold; "Sire," said he, "what all kings are fond of, power." The power of mind over matter, the power of intelligence over brute force, animate and inanimate, alike own man for their master.

The change in the condition of the world, through the application of some new agent, is often marked and peculiar. Great inventions are often followed by great

events. Before the discovery of the magnetic needle, the mariner timidly crept along his course, hugging his native shores; but when the compass was given to him, he sailed away,—away, over the trackless waters, until a new continent burst upon his sight. America was discovered, and countless blessings are vouchsafed to millions of God's creatures. Printing snatched the treasures of knowledge from antiquated manuscripts, gave an opportunity for noble souls, with free thoughts, to awaken the conscience of stupid and careless men, and the Reformation burst out, and the hot lava of truth poured over the nations that sat in darkness, and religious liberty, and freedom of opinion, took the place of the wicked superstitions and horrid incantations of a corrupt church.—The steam engine, doing the work of man, increasing the speed of locomotion, rendering the world more compact, and bringing the nations that were apart near together, must result in a moral millennium. The first fruits of electro-magnetism applied to the arts, is the conveyance of ideas. May not this be a prophecy of the spiritual bearing of those secrets, and their use, which nature, in these latter days, is to unfold?

The mind is bewildered and lost in the contemplation of those discoveries and their wonderful results, which, in the progress of man, are to be achieved. A new heaven and a new earth appear to be opening. Man seems to have been engaged only in gathering pebbles upon the shore, while the great ocean of truth lay before him.

The great merit of the age in which we live, and its superiority over the ancient world, is the fact, that, through the diffusion of knowledge, the science of the philosopher and the skill of the mechanic are combined.

Hence the rapidity with which the discovery of a new principle is made to work out a practical result. The ancient priests understood the fact "that knowledge is power," although it had not been reduced to an axiom as in modern times. They studied nature deeply, and were acquainted with many of its laws. The miracles which they professed to perform, and which kept the people in subjection, show how well they understood the elements of physical power, and how natural was the policy to conceal them. Most of their wonderful deeds can now be explained by well known laws, but there are others, even to this day, which puzzle the man of science. The secret of "that Memnon's statue which at sunrise played," is still a subject of doubt, and there are others of a like character. The knowledge of the ancients was confined to the few, and was often employed to delude the people. The knowledge of the moderns is diffused, and the many reap its advantages.

Ancient art and ancient civilization were affairs of state, for the glory of the public—were illustrated in statues and temples, and an object of wonder,—while the individual was considered of but little account, and was destitute of those comforts and luxuries which centre around our hearth-stones, and make up our idea of home.

We have seen, that the advance man makes in civilization has been acquired through the application of the powers of nature to his use; but there is another thing which must not be overlooked, which has had an equal share in bringing about this result, and that is, that classification of society, which the political economist calls "the division of labor." It is these two great facts, the division of labor and its combination with natural agents,

which make the distinction between the savage and the civilized state. The wisdom and beauty of this arrangement are too obvious to be discussed. Increased production, it may be said, is a desire implanted in our very nature. It is the powerful source of prosperity and thrift; to doubt of the only means for its accomplishment betrays a disposition which argument could neither dissipate nor overcome. But still society may be so constituted as to thwart its very end. There may be rich fountains of *production*, but poor channels for *distribution*. The legitimate result of civilization, the happiness of the many, may be sacrificed for the opulence of the few. National wealth may be acquired, but, at the same time, the individual comforts of the great mass still not be improved.

There is an abundance in England for all her children, but, by an imperfect organization of society, it is unequally distributed. Her lords revel in plenty; her peasants starve in their nakedness. Her very manufactures, which constitute so large a proportion of her national wealth, which are created by the bones and sinews of her laboring men, add but little to their personal happiness. Carlyle quaintly remarks, "that there are many superfluous shirts in her warehouses, and many naked backs in her workshops;" "the great thing," he adds, "is to bring the *shirts* and the *backs* together." And this is, in fact, the great problem which England must work out for itself. Happily, our country has no such dark condition from which to be extricated, and will never have, so long as the genius of her institutions retains any vestige of their primitive virtue.

Although, in a measure, I have just indulged in it, yet I must confess, I like not the comparison so often made

between the laboring population of this country, and that of the old world. There is, indeed, a great, a favorable contrast; but in me, it stirs no ecstasy of joy or congratulation. We may as well boast of the air we breathe, as to rejoice in the fact, that, in common with our countrymen, we enjoy all the rights and privileges of freemen. We are entitled to these blessings by the very act of existence, and our thanks are due only to Him, who is the Giver of all mercies, both temporal and spiritual. Equality of rights, and freedom of opinion, are no boon conceded to us by rulers, or any class in the community, but they are ours, granted with our first breath by the High Chancellorship of Heaven. That the great mass of mankind have been deprived of them, that they have not filled that station to which they were entitled, is a grievous wrong, and a curse; but I am not disposed to join in any strain of extravagant jubilee, because we have not, in a like manner, been bereft. We give our sympathy, aye, our tears, to our suffering brethren of the old world, whose life-blood is sapped by the insidious influence of social institutions, and whose bodies are crushed, and ground to the earth, by the iron heel of despotic power. We bid them struggle, and be brave; we have a faith in their emancipation; we see signs which prophesy of their success. Not only do Parliamentary reports and debates in the Chambers give evidence of an increased interest in their condition, but the very literature of the age, the pulse of the public heart, those works, which take the strongest hold upon the popular favor, are imbued with it. The great significance and astonishing success of the works of Dickens and Sue, and others of this class, are to be ascribed not more to their intellectual merits, than to the fact that they are, in a measure, the embodiment and representative of this feeling. It is the humble, it is the

mass, which now inspire the pen of genius. Those that

" Work, work, work,
Till the brain begins to swim ;
Work, work, work,
Till the eyes are heavy and dim."

It is the wrongs of these, which make genius glow with fervor, and unwonted fire ; and, in solving the secret of their emancipation, a string is touched which vibrates through the heart of the body politic.

The alleged deleterious influence of machinery, is a subject of some interest, and might claim our attention ; but it is a prejudice which cannot take a deep root, in an intelligent community. Until mankind find it easier to walk backwards, than forwards, they will never cease to make inanimate matter release them from extreme physical toil, and do that work, which otherwise would be wrung from their own sinews. Although the curse of labor often proves a blessing, yet mankind are not generally enamored of it, for its own sake. Labor-saving machines will exist, and continue to multiply, so long as man seeks for improvement, or has a desire to develop his original powers. The temporary inconvenience of the few must give way to the permanent happiness of the many. The invention of printing, threw the transcribers of manuscript out of employment ; but he must be the most impudent of the croaker race, who would advise us to go back to the old system. The simplest tool which we daily use, a hammer, or saw, for instance, is a labor-saving machine. How much human power would be wasted, if, instead of the common pump, which is in all our dwellings, we should resort to the old-fashioned rope and bucket ! If any means are expedient to save labor, why not employ them to their full extent ? If we

allow they are useful in part, why not in the whole? The end of machinery is either to save material, or diminish human toil. It increases production, and lessens cost. As it cheapens price, so are its benefits more generally diffused. The cheapness of an article causes a greater number of consumers, and hence an increased number of manufacturers; and thus the system mutually acts and reacts upon itself.

Wages, in themselves, have no fixed value measured in dollars and cents. They depend, as every thing else, upon the demand and supply. There must be a market for labor, as well as for merchandise. The compensation of the one, and the profit of the other, depend upon nearly the same laws. A surfeit of either, produces depletion and loss. At first sight, it would be supposed, that if machinery takes the place of manual labor, laborers must suffer from want of employment; but it is found that this is not the case; for where machinery is most abundant, there flock the greatest number of laborers, and wages, instead of being lower, are higher than they are elsewhere. "A fair day's wages for a fair day's work," is a great desideratum; but it depends upon other circumstances than the use of machinery, if it is not always attained.

There may be more laborers than are wanted in a certain locality, and competition among themselves may reduce their compensation; but this is an evil which cannot easily be remedied, and leave them free agents. It must cure itself. On the other hand, it cannot be gainsayed, that the influence of machinery, by the multiplication of products upon the whole community, has been good, and the comforts of the great mass have been thereby much increased.

American labor suffers from competition with the pauper labor of Europe, and hence the wisdom of a tariff for our protection. It is to be regretted, that the favorable condition of our country, which makes it the asylum of the oppressed of the world, should also be attended with evils. A tariff keeps out the product of pauper labor, but not the pauper laborers themselves, and they swarm on our shores, making a forced and unnatural increase, and struggling with the natives of our own soil for our own privileges. If the foreigner who has become enured to cheap living, and poor fare, would emigrate to our great West, and settle upon the borders of civilization, where labor is wanted, let the stroke of his axe, in felling the forest, follow the crack of the rifle of the first explorer, much good would be done, and all parties benefited; but the trouble is, he throngs the crowded mart, and reaps not the full benefit of his change of country; and, also, interferes with the comfort of others, who look upon him as an ingrate and interloper.

It has been said, that the great mischief of manufactures, is the fact, that a crowded population is confined to one spot, and social evils prevail, which are not common to a rural people.

There may be much truth in Jefferson's remark, "that great cities are great sores upon the body politic;" but he must be a bold reformer who would advise us to demolish our edifices, or plough up our streets. The hiss of the serpent, and the scream of the wild bird, might be heard over their ruins; but it would be far less pleasant to the senses than the hum of industry, or the noise of traffic; and it may be doubtful, if mankind generally, would gain by the change.

There are peculiar temptations from a crowded population, and it is the grandest field of effort for the philanthropist; but man finds it for his interest to so congregate, and lesser evils must be counterbalanced by greater blessings. I see not that there should be any real necessity for crime or suffering in Lowell, or Pittsburg, because the inhabitants are principally engaged in manufactures, than the same number of persons employed in agricultural or commercial pursuits. If there are real evils, apply a remedy now, and not brood over fancied ones which may never come. That industrial feudalism, of which some prophesy, must have its commencement; let us stifle its incipient breath; but it cannot be done by destroying machinery, or stopping manufactures. If the physical resources of the country are becoming so greatly developed, the more necessity then, that those of man should be brought forward and carried to perfection.

Temptation to crime every where abounds, and man's proneness to domineer over his fellows is not yet eradicated from his nature. Social ills exist in all departments of life, but are destined to be removed as man attains his full stature, and approaches the complement of true manhood. Let us as individuals do our share in bringing about this result.

Much eloquence and fine writing has been displayed of late, by philosophers of a certain school, upon the ruinous effect of trade and the disastrous influence of competition in business. I do not deny that, in this seeming antagonism, there are many evils; but I apprehend they are abuses; they do not belong primarily to the system, and those who think otherwise, it seems to me, are bewildered with the fallacy, "that, as one party *gains*, the

other necessarily *loses* in every bargain." This theory, however plausible to the philosopher or the student, causes but little embarrassment to the practical man. The truth is, there is a mutual exchange of benefits, and both parties gain by the transaction. If one party, through villany or fraud, reap an undue advantage, the fault is not in the system, but in the base and ignoble character of the man. The law is equal; it is no argument against its justice that it is not always fulfilled. A fair equivalent is all I have a right to demand from my neighbor. If he is a carpenter and I am a shoemaker, although in his extreme necessity he may require a pair of shoes, yet, if I should insist that he should build me a house before I supply that want, I should demand that which is unjust. I must give him many pair of shoes, or their value, to restore an equilibrium.

We often hear of the *jealousy* between capital and labor; but this, I suspect, is like a more tender relation, because the parties are really so much attached to each other. Capital is an accumulation of labor; it is the fruit of past industry; it acquires a certain degree of power, as do all accumulations, and should be watched; but it derives its chief value from its connection with labor in its simplest forms. Gold, its representative and perhaps its purest symbol, becomes dross, if labor does not see fit to commerce with it.

With these views, I cannot sympathize with that doleful picture, which many honest minds as well as agrarians draw, as to the future prospects of our country from an abuse of capital. The absence of the laws of primogeniture and entail, as well as other features of our social polity, oppose a strong barrier against the concentrated

and lasting influence of wealth. As soon as a man's income is more than his expenses, he becomes a capitalist, and, if not checked by unforeseen accidents to which we are all liable, he accumulates. Under our peculiar institutions, this process is always going on, and, as far as individuals are concerned, conditions are continually changing. The laborer of to-day is the capitalist of to-morrow, and the son of the man who yesterday rolled in affluence, is to-day working for his daily bread. Every man stands upon his own merits,—upon his own habits of industry and frugality;—industry in acquiring, frugality in expending the fruits of his labors. The fact that he may become a capitalist, is a spur to exertion to the very news-boy in our streets.

The idea of property is one of the most important elements of civilization. If it has no security, we relapse into barbarism. We should have but little motive for exertion if it was only to supply our present wants. To accumulate, denotes wisdom and foresight; it is the simplest act of prudence. "To provide for a rainy day," is a maxim sanctioned no less by its age than by its direct appeal to our common sense. This property is denominated wealth. Universal experience bears testimony to the fact that the wealth produced by business is not that which enervates the mind, or unnerves the physical powers of the possessor.

In our community, this wealth or capital, thus collected by the enterprise and industry of our citizens, is not miserly hoarded in iron safes or buried up, away from the active business of life, but, guided by intelligence, and that indomitable energy of which it is the result, seeks new forms of investment, and contributes to the public weal and welfare.

Our rail-roads, and the whole system of internal improvements, our large staple manufactures, are built up by capital accumulated in small sums by individuals. After contributing to personal comfort and luxury, the surplus earnings of the individual go back, in a measure, to the public, stimulating its industry, developing, upon a large scale, the resources of the country; drawing, with a magnetic influence, upon iron rails, brethren of two extremes together, and making of one family, those, whom, in former times, distance would have rendered strangers and aliens.

In no part of the world is it so equally distributed as in New England; nowhere has it achieved greater triumphs, or suited itself with more facility to the exigencies and wants of the community. It is an historical fact, that a large proportion of our great capitalists, being engaged in commerce, looked with jealousy upon our infant manufactures. They did but little for their encouragement; they opposed a tariff for their protection, but when forced to their support by other branches of the confederacy, and convinced of their expediency in promoting the welfare of the people, they turned a portion of their means into this channel, conferring thereby, a benefit upon the community, and opening a fountain from which flowed rich streams of wealth into their coffers.

The alarmists who would terrify our imaginations with the dreadful presentiments of aristocracy and monopoly, through the encroachments of capital, bring up the condition of the people of the old world;—England, for instance, as the sure and conclusive argument for their fears. As that nation has carried civilization to its highest pinnacle, affording the grandest spectacle which the

old world presents of wealth and power, it may be a just comparison,—but let us examine it.

The present condition of Great Britain, so far as its labor and capital are concerned, can be traced to an event far back in its history, and to the subsequent legislation which has naturally been the result. The great portion of the property of England is in the soil, and held by large land proprietors. The land interest is predominant, and has made its laws. In a recent year, the revenues of the kingdom amounted to fifty-four million pounds sterling; of this sum, fifty-one were derived from articles that were the necessities of life, leaving the small balance of three millions from direct taxes on property. Property, with an instinctive self-interest, throws the burden of government upon labor. Labor has no representative in Parliament, and is forced to submit. Now this property was acquired by the ancestors of those who possess it, by force and fraud. Its acquisition was accomplished, not in the harmless pursuits of peace, but amidst the blood and carnage of war. At the time of the Conquest, the victors, who were the few, took possession of the land, and made its original owners, who were the many, bondsmen and vassals. Gradually, and alas, how slowly! in the progress of centuries, they have emerged from their state of slavery and serfdom, although, far from having yet acquired their inalienable rights as freemen.

The first great fact in the history of their emancipation was, when King John was forced, at Runymede, to sign the great magna charta, the foundation and bulwark of English liberty. From that period, from time to time, new privileges seem to have been wrested from their rulers, the democratic element becoming more and more

impregnated into the Constitution. A great victory was attained by the artisans, in the reign of Edward III, who called them together, at Windsor, to build him a palace. They denied his right to assemble them thus, for a mechanical employment; and triumphantly succeeded in establishing the freedom of the craft, thereby adding a new article to the subject's bill of rights. Much was gained in the times of the Commonwealth, in the struggles of the cavaliers and the roundheads, "who trusted somewhat in the Lord, and somewhat in their good pikes." Although they were unsuccessful in sustaining the republican form of government, yet the seeds of new truth were scattered, the harvest of which, succeeding generations have been reaping. The republic of Cromwell did not endure, because the people were not advanced sufficiently to appreciate it.

If this brief abstract of political history is correct, it follows that the low condition of the great mass in Britain has not been caused by any modern system of measures, but results from the fact, that they have not yet got wholly unentangled from the remnants of the feudal system which formerly held them in bondage. The new party lately sprung up, and known as young England, of which D'Israeli is the leader and representative, ascribes the evils, indeed, to the change which has been wrought in its character since it has been a trading and commercial nation. He would restore the nation back to what he considers its ancient patriarchal condition, where the few should have all the power and influence, who would kindly support and protect the remainder.

Better the stirring competition of freedom and liberty, than the drowsy life of dependence and ease. The

change to be wrought is, the elevation of the children of the people, not the safety and perpetuity of classes. All hail to his noble effort! it stirs thought, and awakens sympathy; its results will be good, although not such as he has anticipated.

But still it is asserted, and with much plausibility, and an appeal to facts to substantiate it, that the physical condition of the working classes in England has deteriorated, and it is the new application of science to the arts which has brought about this result. This opinion has gained much currency recently, from the admissions of Lord John Russell, in his speech at the close of the late session of Parliament; but, if we take his testimony, we should also that of Lord Brougham, and Macaulay, who testify the reverse. I say this, not to palliate any of England's sins, but to trace them to their true source. It is a fact, which cannot be disputed, that while manufactured articles are cheaper in England than they were fifty years since, agricultural products are much dearer. The reason of this is obvious, first, from the nature of its legislative enactments, its corn laws, and the peculiar organization of Parliament, to which an allusion has already been made, and, secondly, to the fact that machinery has not been brought to aid the farmer, as it has the mechanic. If machinery had increased the productions of the agriculturalist, as it has that of the manufacturer, this contrast in prices would not have taken place; benefits would have followed alike in each department, equitable to both producer and consumer.

But, not to dwell longer on England, let us now turn to our own country, and consider its history and condition. Who were its founders? Noble-hearted men, who de-

terminated to be free, escaped from the institutions of the old world, and laid, upon a virgin soil, the foundations of a republic. With a sad experience of the past, and a bright hope for the future, they laid, broad and deep, the bases of our social and political edifice.

Their right of possession was acquired in the only legitimate way; either by purchase, or their own labor and industry. In the cultivation of the earth, making it subservient to the happiness of man, for whom it was intended, they secured a title-deed which arms and force could never have given them. No land barons, deriving their power from the hereditary despotism of ancient days, lord it over our heritage. Honestly was its first proprietors endowed with it, and just laws secure its division and descent to posterity. Our legislators, instead of being our masters, are our servants; the power with which they act, we delegate to them, and it soon returns to its source. Taxes, instead of pampering an idle and bloated aristocracy, are economically applied to the public good. No large standing army in times of peace eat up substance without an equivalent. No gorgeous church establishment tampers with our conscience, or drains our purse to support its worldly prelates. Industry is free to seek its own sphere of labor, and finds its reward. The education of the child we consider as necessary as his food and raiment; and the tendency of our whole progress and civilization, leads to the expansion and development of our country, and the character of our people, rather than to luxury and ease. To say that the people of such a nation, with such advantages, are to become degraded and besotted like the masses of the old world, is a sad commentary upon the wisdom and faith of those who hold such opinions. With the eye of an intelligent

faith, which is itself prophecy, we see that such cannot be the destiny of our country ; the hopes of mankind are not thus to be crushed ; the great march of humanity, of which we lead the van, is not to be brought to a sudden halt ; we are to go on, and, like our own national bird,

“ Firm, on his own mountain vigor relying ;
Breasting the dark storm ; the red bolt defying ;
His wing on the wind, and his eye on the sun,
He swerves not a hair, but bears onward right on.
Columbia, like the eagle's flight, such shall be thine !
Onward, and upward, and true to the line.”

Let us, then, have a faith, strong and enduring, in the perpetuity and continued usefulness of our institutions. Let us guard them from open foes without, and insidious enemies within. Away with the narrow jealousy between brethren engaged in the different avocations of society ! Let us not be cheated out of propriety by brazen-faced demagogues, who, previous to an election, pander to the lowest prejudices. Kind souls ! who take upon themselves the care of the dear people, puffed up with cant, and a mawkish sympathy for their wrongs, but who are, in reality, drones in the political hive, seeking only for its honey. To no class do they so often address themselves as to the mechanic. Away with them ! let scorn meet their contemptible insults, and the panoply of truth, and self-respect, will protect us from their envenomed shafts and dastardly manœuvres. I speak strongly on this point, for I feel strongly ; my voice may be as “ a pebble against the tide,” a breath against the whirlwind ; but it is given with a right good will.

Enough of a general character has been uttered ; let us now devote the remainder of our time to the consideration of topics, particular and local in their character, but equally pertinent to the hour and the occasion.

The Association, at whose anniversary we have assembled, held its first meetings during the early part of the year 1795. The preliminary meeting was called anonymously, by Col. Henry Purkitt, through the columns of the *Columbian Centinel*, published by Benjamin Russell. This meeting was held at the Green Dragon Tavern, a house rich in interesting historical reminiscences, it being the head quarters of the sons of liberty, immediately preceding, and during, the revolutionary struggle. Some of the early founders of this Association had been members of that secret committee, composed principally of mechanics, who, in connexion with Hancock and Adams, and Drs. Warren and Church, were combined to watch the movements of the British soldiers, and the conduct of the Tories.

Paul Revere presided over this first meeting, and was subsequently chosen President, when the Association was duly organized on the evening of April 16th, of the same year. It was first called the Boston Mechanics Association, afterwards the Associated Mechanics of the Commonwealth of Massachusetts, and finally was incorporated under its present name, in 1806.

It is a curious commentary upon the times to learn, how severe a struggle the Association had to encounter, before they could procure an Act of Incorporation. The records give evidence that, from year to year, for ten years, able committees were appointed to wait upon the General Court, and finally with success.

There seemed to be a fear that the Association would monopolize influence, manage trade, and regulate prices to the detriment of other classes in the community. To

those who were acquainted with its design, or the character of its founders, such prejudices must create a smile. It has, no doubt, wielded an important influence, but it has been conservative and healthy in its character, and for the general good of all conditions of the common weal. The Association has always embraced a large proportion of the mechanic interest of the city, and the Commonwealth, and enrolled a larger number of members than any similar institution in the world. Its beneficial objects are so apparent, that it is a matter of surprise that all who are concerned for the character and welfare of their profession and can legally become members, do not join it. If it does not hold out all the advantages it should, it is time to consider of them, and if the progress of the age suggests new improvements, to incorporate them into the Association.

It has done much to give that character for probity, and intelligence, which the Mechanics of this community as a class have enjoyed, and its numerous members, who have been the recipients of public honors, and borne their share of exalted public burdens, have alike gained a good reputation for themselves, and reflected credit upon the Association. Probably under no other organization, has there been a larger number of able public-spirited individuals, whose services have been oftener required in promoting the public weal: they have stood first, and foremost in every good work, and have sprung with alacrity to services ardent and burdensome in their character.

Since the formation of the Association, there is no doubt that the social position of the mechanic, particularly as regards wealth, and the enjoyments and luxuries of life, has much improved. And here, perhaps, there is a dan-

ger, for it is a singular fact, and somewhat paradoxical, that in the proportion as we are poor, so seems to be the extent of our benevolent feeling and action. The inhabitant of the hut, hospitably entertains even the *stranger*, let it be to the division of his last crust, while the inmate of the palace, whose means are so ample, thrusts his needy *neighbor* down his marble steps without feeling or remorse.

The second word in the title of our Association is Charitable, the most important idea in its early history, and the most deserving of regard. Is there not danger, that, in the general prosperity of the Association, and the almost universal success of its members, this feature may be overlooked?

That Charity, of which this institution is the almoner, can be demanded as a right, by the less favored of our brethren. It is not of a cold, pecuniary character, doled out in dribblets by municipal or parochial officers, but is a right, which honesty and purity can demand. The recipient has himself contributed to the fund, and his circumstances, however sore or grievous, are those to which none of us may be exempt. Who that has felt how blessed it is to give, or has experienced those emotions of the heart, which proceed from the performance of a good act, who that has seen the tear of gratitude steal down the trembling cheek, the breast heave, the quivering lip, the articulation almost checked in utterance,—who that has seen, or felt any of these, bursting up from the well-spring of the affections, will quibble about the annual appropriation for the benevolent fund. Alas, my brethren, how selfish we are,—brothers, and yet how often aliens! The present occasion, all redolent as it is with pleasure, suggests to me the inquiry, if there are not those

of our own number, those, whose names are still borne upon our Constitution, who, even this day, may be in want and destitution, and whose bodily ills, however sore, will not compare with that wearing heart-sickness which preys upon, and is consuming their sensitive minds. Are there any widows, whose husbands were once honored and esteemed associates, whose walk among our citizens was upright, whose strong arm upheld the country's weal, are there any such, whose weary burdens we could lighten, and assist them to bear the cross under which they labor? Have we done our duty, our whole duty, in this respect? Has our Association's Relief Committee ministered to all her sorrowing sons? Have we put ample means in their hands for this purpose? These are important inquiries, and deemed not inappropriate to this occasion; more particularly at this time, when other objects have a tendency to engross the attention of the members, and the action of the Association.

Another sphere of influence contemplated in the design of the Association, and of personal interest as members, are our duties to the rising generation of mechanics, to apprentices, to those who shall succeed us in the active walks of life, and uphold the dignity and character of our profession.

The close and intimate bond which formerly connected the master and the apprentice, has become much weakened. It must be confessed that there are some evils growing out of this state of things. That restraint under which the minor once lived, although sometimes perhaps irksome, yet did much to discipline the character and give a thoroughness and system to the instruction he received. I suppose there is hardly a regular indented apprentice to

any member of this Association, and it is becoming almost as equally rare that they live under the roof of the master, or that he feels any interest in them, excepting so far as relates to their mere mechanical duties, those which concern the shop and the work-bench. Now, it needs no labored argument to enforce the truth that thus our whole duty is not performed. Our personal influence should be of a character to command their esteem; and all the means in our power should be at their disposal, to encourage and foster in them a feeling of self-respect; thereby aiding in a preparation for the responsible duties of men and citizens.

There are other duties we owe, than those of a professional character; times have indeed changed; the paternal character of this connexion has become obsolete, but, still we are bound to act as guardians, and friends, and we cannot shake off the responsibility.

The Association as a body have done something for their improvement. Diplomas have been awarded for faithful apprenticeship; in former years, schools have been established for instruction in elementary branches of knowledge. That department devoted to the useful, and ornamental accomplishment of drawing, may be considered an important branch of our institution. It is matter of congratulation that it has been so successful, and that, under its late lamented teacher, its results were so meritorious to the successive classes of pupils, who were brought under his influence. The arts of design we as a nation have much neglected; their practical benefits are obvious; their importance in the improvement of the Mechanic Arts, cannot be over-stated. How much real satisfaction there is in a beautiful form! Grace and taste may

be displayed in nearly every article of manufacture, however humble it may be.

The arts of design are taught in France as a part of common school education, and we see the result, in the style and pattern of their elegant manufactures, unrivalled in the world.

When applied to architecture, how wonderful are their advantages! Instead of misshapen and clumsy buildings stately edifices arise, pleasing to the eye, and a source of refinement to the mind. There is no reason why our common shops, and warehouses should not be structures of beauty, and afford pleasure in their contemplation as well as profit, and here it may be remarked, that it is a gratifying fact, that a change seems to be going on in our city in this respect; our builders have evinced a decided improvement in the style and character of this class of edifices. Our business streets are becoming lined as it were with palaces, and the noisy haunts of trade minister to our love of taste and beauty. Our churches, too, as they go up and point with their aspiring finger to heaven, appropriately receive the best homage of art: we sacredly ornament, with the choicest manifestation of skill, the dearest home of our affections,—“Our Father’s House.”

Besides the general tendency of our school to refine the taste, the important branch of purely practical art has not been neglected. Machinery and models, and other mechanical subjects, have received attention, and much useful knowledge has been acquired by the pupils on these subjects.

In connexion with our duties to apprentices, I cannot let the opportunity pass without bearing my testimony to

the usefulness of the Apprentices' Library, which was formerly under the care of this Association, and which has been a rich source of refinement and culture to the young mechanics of this metropolis. Its affairs are conducted with a wisdom and energy which deserve the highest encomiums, and its practical effects can be judged by those who are conversant with the young men who enjoy its privileges. I feel that it is our duty as individuals, and as an Association, to evince more interest in their welfare, and it is a subject to which I would respectfully call your attention, for it is from their ranks that the recruits of our Association are to be gathered.

The most splendid field of effort of our Association, which has brought it before the public, and given it a celebrity, are those grand exhibitions of mechanical skill and industry which, of late years, have been held under its auspices.

The creative mind of man has been there displayed in all its multifarious forms, and admiring thousands paid homage to the usefulness of the mechanic, who otherwise would enjoy the result of his labor without thought or regard. Upon the utility of these exhibitions in stimulating American genius and ingenuity, and promoting improvement among ourselves, it is not the purpose of this occasion to expatiate. With wisdom has the custom been introduced of connecting with them an exposition of their merits, from some gifted mind, from other professions and walks of life. This intellectual feature of them, however, it seems to me, might be much enlarged. Would it not be a good project to hold, during the week of the exhibition, a convention of scientific men and practical mechanics? Lectures of an instructive character,

embracing an account of some invention, being a new application of science to the arts, should be delivered, and discussions held upon disputed points of philosophy or mechanism. It might be a kind of anniversary week, when learned savans and ingenious artisans should hold consultation, and help on the amelioration of mankind through the diffusion of knowledge, and its practical application.

The occasion would resemble the Olympic Festival of the ancient Greeks, which was devoted not only to games of strength and skill, but to the recitations of histories and odes. The intellect and the senses could alike minister to our gratification, and enter into the joy of the common festival.

The most enviable path of honorable distinction is that of the inventor; but the ambitious spirits of the world, who have coveted the trumpet of fame to immortalize their names, have oftenest sought their object on the field of blood, or in the noisy conflict of sectarian or party strife. But how idle have been their efforts! The memory of most has hardly lasted as long as their monumental stones, while those who have survived the wreck of time, are damned to ignoble fame, and only "serve to point a moral or adorn a tale." The truly famous of the earth are the benefactors, the great inventors, the mechanics of the world. An Archimedes, a Faust, a Bacon, an Arkwright, a Watt, a Franklin, a Whitney, a Fulton,—all these, and countless more, have engraved their names deep in the world's history, and have earned a lasting remembrance by their contributions to the happiness and comfort of mankind. Their contemporaries, the great captains, the politicians, and the titled, made perhaps

more noise, and were lapped and fondled in more luxurious ease during their life-time; but none rose up to call them blessed, and no gratitude sinks into the hearts of posterity for their services; while the really great lived in the noble satisfaction of good performed and lives well spent, and the laurel still blossoms green upon their tombs. Fame's proud trophies can only be acquired by deserving merit; they cannot be grasped by feats of arms, over the prostrate necks of a fallen people. How sad and long has been the period that mankind have been learning this truth!

In the consideration of the benefits of our Association, and the improvements which should be introduced to keep up with the spirit of the times, as well as to carry out its original design, there is one topic which has become almost stereotyped in the late addresses on this anniversary, and that is, the necessity of a hall for our use. It is a matter of regret, that we did not add to the interest of this occasion, the ceremony of laying the corner stone, as was contemplated.

The recent action of the Association, however, and the new enthusiasm which seems to have inspired our members in overcoming a late obstacle thrown in their path, give assurance of the speedy consummation of our hopes.

If we regard our own honor and happiness, as well as the reputation and character of our good city, this matter cannot much longer be delayed. The mechanics of Boston should erect an edifice which should be our pride and boast; it should be commensurate with the skill and taste of our members, and the glory and renown of the city in which we live. The project has become a subject of

public concern, and happily our own wants, and those of the community are so blended, as to spur us on to the completion of the enterprise.

Our Association has acquired a good name; let us have a local habitation, as well as a name. Many advantages, which our members have a right to enjoy, have been postponed for want of this building, and now, let it be carried forward with an energy characteristic of our Association on other matters. Our social sympathies demand a freer exercise than occasional business meetings afford. The advancement of science calls for opportunities to investigate and illustrate its principles. The progress of the arts requires a depository, where their claims may be examined and allowed. The community ask for a monument of mechanical skill and genius. Let its walls go up in strength and beauty, embodying the finest conception of the mind, and the most skilful application of the hands. Let thought give to art its best impression, and make the granite which is embedded in our soil, and the trees, which wave in our forests, stand up, and speak in our very streets, of our progress in civilization and refinement. Let us but will, and the work is accomplished.

This occasion should not pass without the expression of gratitude for the labors of the early founders of our Association. Six of the original members are still with us, and affectionately regarded as patriarchs of the olden time.

Since the last anniversary, Benjamin Russell has finished his course upon earth, and been gathered to the fathers. Through a long and eventful life, he filled a

large space in public regard. Commencing it at the beginning of the revolutionary troubles, he was a devoted actor in that important drama. As the conductor of a public journal, perhaps no man has exercised so much influence in New England. A patriot of the school of Washington, his country was the idol which he worshipped. For many years, the President of the Association, the first who officiated at its Triennial Festival, and ever its warmest friend and advocate, he was one of the last of those revolutionary worthies, who connect the present with that heroic age, and his memory should be cherished, and his example held in reverence by that class of the community, of which it was his pride and boast to be a member.

The limits of this already lengthened discourse prevent an extended consideration of the duties of the mechanics, as a class, to the community, of which they are so important a part. Forming the great central body of the people, midway between the two conditions of fortune, the very rich, and the very poor, their circumstances are favorable for the exertion of the happiest influences.

Under liberal forms of Government, the tendency of the active minds of the citizens is, generally, towards two extremes, the conservative, and the radical; the proper proportion of each element, makes the most perfect system of Government, and the wisest administration of its laws. The great middling interest is the safest repository of power; it is their influence which gives to Government stability in times of peace, and proves its bulwark in times of war. They are essentially patriotic, for their salvation depends upon the purity and integrity

of existing institutions. Disorganizing and agrarian projects find but little favor; they are alive to the gentle spirit of reform; but the incipient, or open spirit of treason, finds but few supporters in their ranks. The mechanics, with the farmers of our land, constitute the great body of this class, and to them, are entrusted, in a great measure, the safety and perpetuity of republican institutions.

This Association, starting upon its career so soon after the consummation of our country's independence, fostered and cherished by those, who, in council, or tented field, had labored with sacrifice, even unto blood, for its welfare, this Association, organized on such an era, and by such men, should command an influence commensurate with the patriotism of its founders, and the glorious success which has followed their labors.

It should excite a moral power, diffusing itself through the whole community. The change which its members achieve in the aspect of the material world, through their professional labors as mechanics, should be followed by a corresponding influence, by their example and conduct as upright and conscientious men. They should administer a stern rebuke as well to the seductive wiles of social morality, as to open political heresy, and corruption. The soft and kindly virtues which adorn humanity, should harmonize with the strong intellectual and physical power which they so eminently possess: Alas! that so rich a soil should ever be choked with weeds,—a community so affluent in blessings be burdened with vice and folly. Our city is becoming one of the greatest marts of trade in the civilized world; the natural enterprise of her citizens is stimulated to its highest degree; her rail-roads, like the Appian ways of ancient imperial Rome, are pouring the

richest products of the land, and the sea, into her lap. Is there not danger, that her increased business may beget avarice, or engender luxury, and the hearts of her people be blasted through an intense and insane love of gold?

I have been informed by aged citizens, to whom this community look up as to fathers, whose venerable forms are rendered sacred, by a long life of integrity and usefulness, that our city has sadly degenerated from that high standard of moral excellence which formerly distinguished our business men,—our leading merchants and mechanics. That nice and punctilious sense of honor, that steadfast adherence to the right, whatever might be the consequences, have given place to the shuffling shifts and under-hand manœuvres, which crowded marts and excessive competition have a tendency to engender. This opinion may be exaggerated, as age in the retrospect of the past often looks upon the former times as better than the present, and the memory lingers with peculiar fondness upon the scenes and actors of early days.

But I appeal to the experience of many who are present, if there is not some truth in this statement. Carry yourselves back to your early days, and do there not come up before you, in every department of active life, noble images of upright men?—men of the olden time, whose integrity was no more to be questioned than that of an apostle, and who would have shunned the slightest temptation to a dishonorable act as pollution of the deepest dye. Does it not seem that the proportion of men of this stamp is lamentably small? Every day do we not hear of some mean and contemptible trick and artifice, some transaction, as base as ever instigated the author of darkness, and these performed by men who wish to be considered hon-

orable, and whose daily walks in our streets are greeted with smiles and seeming respect ?

Let it then, Gentlemen, be the hallowed influence of your Association, aye, its leading object, to foster and strengthen that noble and high standard of integrity, which befits Christian men, living in an era of unsurpassed civilization and refinement.

Dollars, piled high as Olympus, cannot compensate the soul for the prostitution of its noblest powers to the arts of chicanery and fraud. The least alloy of guilt renders the most ample fortune but dust and ashes. "What advantage to a man if he gains the whole world and loses his own soul ?"

Let not the motto of our Association, "*Be just and fear not*," become an idle and obsolete idea, suited only to its early founders, and their contemporaries, but now, and through its whole existence, may it be significant of the character of every individual connected with it; and that *right arm* be symbolical that every nerve shall be strung, and every muscle exerted in defence of those principles of justice and truth, of which, the even *balance* upon our Diploma, is the representative.

APPENDIX.

THE First Semi-centennial Anniversary of the Massachusetts Charitable Mechanic Association, and its Thirteenth Triennial Festival, was celebrated on Thursday, October 2d, 1845.

In the morning, the Association assembled at the Boott House, at 9 o'clock, and transacted business.

At half past eleven, a procession was formed in the following order, and marched through the principal streets to the Melodeon.

Aid.	Chief Marshal.	Aid.
	Band of Musicians.	
Marshal.	BANNER.	Marshal.
Marshal.	President of the Association.	Marshal.
Marshal.	Chaplain and Orator.	Marshal.
Marshal.	V. President, Treas., and Sec'y of Association.	Marshal.
Marshal.	Members of the Government of Association.	Marshal.
Marshal.	Committee of Arrangements for the Celebration.	Marshal.
Marshal.	Invited Guests.	Marshal.
Marshal.	Original Members, in Carriages.	Marshal.
Marshal.	Past Officers of the Association.	Marshal.
Marshal.	Members of the Association, according to seniority.	Marshal.

Henry N. Hooper, Esq. officiated as Chief Marshal, supported by Messrs. Grenville Mears, and Charles G. King, as Aids; and the following gentlemen, as Assistants:—

Robert Andrew,	Nathaniel Francis,	John P. Ober,
Henry Bailey,	Kimball Gibson,	Samuel Prince,
Jos. L. Bates,	C. W. Haven,	J. G. Russell,
Benjamin Beal,	George Hewes,	John Shelton,
John Bigelow,	Oliver Holman,	James Tolman,
Isaac Cary,	Robert Marsh,	Abel Tompkins,
George Clark,	James Mitchell,	J. D. Towle,
George Darracott, Jr.	Otis Monroe,	Joseph M. Wightman.
James Dillon,	Samuel C. Nottage,	

ORDER OF SERVICES AT THE MELODEON.

I. VOLUNTARY ON THE ORGAN,

BY GEORGE HEWS, ORGANIST.

II. PRAYER,

BY REV. CHANDLER ROBBINS.

III. HYMN,

BY LEWIS G. PRAY, ESQ.

Tune—"America."

God of our Being! We
In love would raise to Thee
Our songs of Praise:
To Thee, from whom we came,—
Who wrought our wondrous frame,—
Lit up its mental flame,
With heavenly rays.

Thou mad'st the HAND! whose skill
Controll'd by Thought and Will,
Makes Art divine!
Which fells the monarch Tree;
Sets quarried Marble free;
Explores each hidden sea,
And darksome Mine.

Which rears for Man a Home;
Which spans the classic Dome;
And lifts the Spire!
Which bids the Canvass breathe!
The Man, the Marble, leave!
Beauty its garlands weave,
While all admire.

By it, the wheel and flame
Extend old Ocean's fame,
By skill refin'd:
By it, the Thought which fires,
Shot through electric wires,
With speed no race e'er tires,
Goes where design'd

God of the Hand ! may we
 Use it for Man and Thee,
 Thro' all our days ;
 To smooth the bed of pain ;
 Strike off th' oppressor's chain ;
 Give Wisdom leave to reign :
 And Thee the praise.

IV. ADDRESS,

BY FREDERIC W. LINCOLN, JR.

V. ODE ON ART,

BY MISS H. F. GOULD, OF NEWBURYPORT.

Air—"The Pillar of Glory."

When God had of earth laid the viewless foundation,—
 The pillars had reared which the firmament buoy,
 The stars of the morn sang, in glad celebration ;
 And thus "all the sons of God shouted for joy."
 In the blue vault sublime
 Hung the clear lamps of time,
 Their beams shedding warm on the young teeming earth :
 Sun and soft dewy hours
 Spread the grass, leaves, and flowers ;
 As nature awoke, hymning Heaven at her birth.
 When earth had been stained, till the deep's broken fountains
 Were poured forth, and Nature was drowned as she stood,
 The angel of ART sailed above the lost mountains,
 And bore in her bosom our race, on the flood !
 'Twas a bright promise-bow,
 Telling ART thence would go
 From glory to glory, in goodness to man ;
 Plying her golden key
 To the vast treasury
 Unknown, but for her, in the world's mighty plan !
 Her pupils are grand-master-builders of nations ;
 To kings give they throne, sceptre, vesture, and crown ;
 They spread earth and sea with her fair new creations ;
 They prop up the states that would else crumble down !
 Freedom's broad banner waves,
 Armor her foemen braves ;
 While, warm from the depths of the heaven-kindled heart,
 Music wafts praise, to rise
 Up the far-ringing skies ;
 And all, as the gifts of man's good angel, ART !

Her son is the rich man ; his race are his debtors :
 The elements list in his service, for them !
 He gives sight to Blindness,—to Learning, her Letters ;—
 To Plenty, her horn, and to Beauty, her gem.
 Water and fire at strife
 Give his fleet courser life,
 When earth soon is compassed,—the deep quickly spanned !
 Power and wealth sure are his,
 In the fine mysteries
 That move in the clay of his own plastic hand.
 All hail, to the Craftsmen, with hands that can labor ;
 With arm nerved by purpose, and deeds spreading wide !
 For, these are the helper, the friend, brother, neighbor !
 And poor but for them were the great world beside.
 Ever be this their aim,—
 In the cause and the name
 Of man's Friend on high, that their works all be done,
 Meekly who sojourned here,
 Loved the poor, dried the tear,
 And wrought, when below, as the *Carpenter's Son*.
 'Tis they give to Commerce her ark on the ocean,
 To Science her wand, and her star-sweeping wing ;
 They give temple, altar, and book, to Devotion,
 Through all earth proclaiming our Saviour and King.
 By the fond sisters three,
 Faith, Hope, and Charity,
 The last still the first, breathing life for the whole ;
 Be a house theirs, that stands
 High, and " not made with hands,"
 Though earth melt, and skies pass away as a scroll !

VI. BENEDICTION,

BY REV. SEBASTIAN STREETER.

THE FESTIVAL.

[The report of the occasion is abridged from an account in the Daily Evening Transcript, of the following day.]

AFTER the conclusion of these services, the procession was re-formed, and proceeded to Faneuil Hall, where a sumptuous banquet had been prepared for the Association, which was unsparingly partaken amidst animated social converse. It was gratifying to observe the hoary-headed veterans, who were present at this fête, as the few remaining, *original* members of the Association,—Oliver, Johnnot, Daniel Messenger, Peter Mackintosh, Samuel Perkins, and James Phillips,—men well remembered in the prayer of the officiating clergymen. *Major Henry Purkitt*, another veteran member, (present on previous anniversaries,) was too feeble to attend; but he was recollected on the occasion, amongst the "absent friends," with heartfelt aspirations, that his declining years might be calm, and peaceful, until the indulgent sunbeams of his life had gone down in glory, and until the wheels of life were still.

The Hall was chastely decorated by Captain John Green, a member of the Association. On the east end of the Hall were inscribed the mottoes, "AGRICULTURE," "MECHANIC ARTS," "COMMERCE," "FRANKLIN," "FULTON," "THE PRESS," KNOWLEDGE IS POWER," &c. The panels around the gallery bore the names of fourteen Presidents of the Association,—*Revere, Hunnewell, Russell, Cotton, Perkins, Wells, Armstrong, Messenger, Buckingham, Fairbanks, Darra-cot, Lewis, Clark, and Smith*, the latter being the present President. On the west end, an arch had been erected, the keystone bearing the inscription, "Instituted 1795," and on the border of the arch the name of the Society—"MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION." In the centre of the arch, a silk banner, with "CHARITY," in gilt letters, and the motto of the Association,—"*Be just and fear not.*" The pilasters at the right and left bore the names of the past Vice Presidents, Treasurers, and Secretaries. The columns were wreathed with flowers and evergreen, whilst streamers, arranged in a cone-like form, radiated from the chandelier.

The invited guests, at the President's table, in addition to the veterans mentioned above, were, His Excellency Governor Briggs, His Honor Lieutenant Governor Reed, Hon. John G. Palfrey, Secretary of the Commonwealth, Hon. Joseph Barrett, Treasurer, Hon. Samuel H. Walley, Jr., Speaker of the House of Representatives, His Excellency Edward Everett, Hon. Robert C. Winthrop, Peleg W. Chandler, Esq., President of the Common Council, F. W. Lincoln, Jr., Esq., Orator of the day, Rev. J. I. T. Coolidge, Rev. F. D. Huntington, Rev. Chandler Robbins, Rev. S. Streeter, Chaplains of the day, Commodore Nicholson, Captain Josiah Sturgis, Marshall P. Wilder, Esq., President of the Massachusetts Horticultural Society, Col. Russell, Ex-President, and A. J. Browne, Esq., Vice President of the Salem Mechanics Association, together with the following past Presidents of the Association : Hon. Samuel Perkins, Hon. Samuel T. Armstrong, Hon. Daniel Messenger, Joseph T. Buckingham, Esq., George Darracott, Esq., Joseph Lewis, Esq.

Grace having been implored, by Rev. Mr. Coolidge, the company proceeded to discuss the repast provided, which they accomplished in a manner, which gave proof of their satisfaction. Thanks were then returned by Rev. Mr. Huntington.

After the cloth was removed, GEORGE G. SMITH, Esq., President of the Association, called the attention of the assembly. He said he should not ask to be excused for not making a speech on the occasion, because he was fully aware that the longer he spoke, the less would be his claim to be excused. He would, therefore, restrict himself to simply congratulating the gentlemen before him, upon the arrival of the institution, in which they all took so much pride, at its present age ; he would congratulate them, too, upon its continued prosperity ; but, at the same time, he would remind members, that, in connection with great prosperity, a great amount of duty devolved upon them. The duties, he would briefly say, which pressed upon the members of this Association, might be divided into three classes,—those which related to their social obligations, their charitable obligations, and their obligations to themselves to improve and extend the cultivation of their own minds. He would not detain the assembly with any lengthy remarks on any of these topics, but would content himself with reminding his friends of the Association, that the success of their measures depended upon themselves. And finally, he expressed his hope that the exercises of this day might suffice to kindle and keep alive such a spirit as would carry out the intentions of the founders, and advance the collective and personal prosperity of the members of the institution.

The President concluded by announcing the first regular toast, as follows,—

Our first Semi-Centennial Celebration—Rich in recollections of the past—rich in anticipations of the future.

Air,—Long, long ago.

Second regular toast,—

The President of the United States—The people have conferred upon him their highest honor, may he faithfully repay their confidence, by following out the principles upon which our republic is founded.

Air,—Hail Columbia.

Third regular toast,—

The good old Commonwealth of Massachusetts—As she stands—with all her institutions. May God forever bless her.

Air,—Massachusetts March.

His Excellency Governor Briggs, amidst the enthusiastic applause of the whole assembly, rose in reply to this sentiment.

He said, that since it was expected he should speak for the “good old Commonwealth of Massachusetts,” he was sure he could say she was grateful for this notice which her children took of her, and that she regarded this Association as among the best and most worthy of her children. But as to any thing farther, he hardly knew whither to direct his thoughts, in the few remarks which might be expected from him. If he thought of the character of the Association and its members, the sea of mechanics’ faces before him told what that was; if of its objects, they had been presented to-day, in the most beautiful language and mathematical manner, (if he might be allowed so to say); if, of the venerable and honored men who had numbered themselves within its ranks, their names were emblazoned upon the walls, and nothing he could say would call them more vividly to mind. He experienced emotions upon this occasion which he wanted terms fully to express. But he should not be misunderstood in saying that he reverted, in thought, to the time when he, too, was an actual mechanic, and that, within the last hour or two, he had felt more regret than ever, at having ceased to be one.

But yet, he could not bring himself to follow the course seemingly prescribed by the theory, if not by the practice, of some, to unjustly elevate the mechanic at the expense of his brethren in the community. To talk of mechanics, as a class, and to undertake to give them the preference to, and set them above all other classes, he knew his intelligent hearers would regard as an insult. They were too manly, too noble-hearted to desire any such thing. There was no test class in our

community. It was false to pretend that one existed. And as, among individuals, he only was best who bore the best character, so among classes, the one only was best which did most for our common country.

The character of an Association was made up of the character of its individual members ; and no one, he hoped, would accuse him of flattery, when he now repeated what he had often before said, that the Association he now had the pleasure of addressing, bore the highest character for intelligence and utility, of its class in the world. But why was it so ? Only because it was made so by its own members. Their influence was seen in its effect upon the characters of each other, upon their Association, upon their city, its architecture, its commerce, its industry, and, in short, upon every thing within its borders which human ingenuity could contrive, or human perseverance work out.

Who was there, amongst all his hearers, that did not feel a glow of honest pride as he cast his eyes upon yonder honored name, (Franklin) ? What was he who bore it but a mechanic ! A Boston mechanic too ! Born almost within a stone's throw of this very spot, and brought up in the midst of the localities around which cluster so many associations, it was his fortune to nobly sustain the dignity of his calling and the honor of his home. It was related of the family, that Franklin's father was in the habit of reading to his children a chapter in Proverbs, wherein was the following verse :—" Seest thou a man diligent in his business ? he shall stand before kings ; he shall not stand before mean men." The children heard, remembered, and pondered upon the sacred truths of Revelation. By and by, the old puritanical father was laid in the grave, but the effect of his teaching remained. It was manifested in all the life of Franklin, from infancy to his death. And though, at the outset, his position contained, in itself, nothing brilliant, or remarkably advantageous, yet, his genius and his indomitable will, succeeded, at last, in working out for him the proud rank he attained in the catalogue of earth's mighty minds.

The various epochs in the life of Franklin present a series of pictures full of instruction and encouragement to the industrious youth of our nation. At first, a tallow-chandler's boy, filling his moulds from a kettle of melted tallow,—then, a printer's apprentice, setting types in a small and inconvenient office,—again, a stranger in Philadelphia, walking the streets with his bundle on his back, and his frugal meal, a loaf of bread, in his hand,—who would have supposed that in him, a raw and inexperienced boy, was beheld the future philosopher who drew the lightning of heaven from the clouds, and forced it to obey his will !

Yet so it was. And, finally, during the war of the Revolution, when the American nation sent their first minister to France, it was Benjamin Franklin, the Boston mechanic, that represented the republic, and "stood before kings" at the magnificent Court of St. Cloud.

This he regarded as an illustration,—a brilliant one to be sure, but one which might yet be equalled, of what a Boston mechanic might become,—and he trusted that the traits in Franklin's character which made him what he was, might not be wanting in his hearers and their descendants.

It had happened to him, the evening previous, to attend, in a neighboring town, a similar meeting,—though there was one improvement upon the present assembly, inasmuch as not only mechanics, but the wives and daughters of mechanics were gathered together. There was displayed not only the beauty of art, but the beauty of creation, and he trusted, in another year, to witness the same spectacle here. He said at that meeting what he took pleasure in now repeating, that one point of these Mechanic Associations was to make labor looked upon as honorable,—a sentiment which could prevail only among freemen. He had said then what he would again say now, that the true sentiment of civilized humanity was, to regard the hands as servants of the soul, and to consider whatever hands find to do, that is honest, as honorable. He would not detain the company further than to propose as a sentiment:—

The Members of the Massachusetts Charitable Mechanic Association—May the virtues, industry, and intelligence, which distinguish them among their fellow-citizens, be found among their descendants when they shall celebrate, in this place, the centennial anniversary of the Society, in 1895.

His Excellency's remarks were loudly applauded, and, at the close, the Band played the *Governor's March*.

His Honor, Lieutenant Governor Reed, following Governor Briggs, observed that he had but a word to say, and that should be concerning the great value of institutions like the one whose members he now addressed, not only in making men charitable towards their fellows, but in doing what was even better,—placing them beyond the necessity of seeking charity. Teach a young man, that, by honest industry, he could attain not only competence, but wealth, and the highest honors, and what greater incentive to industry and probity could you set before him? What, and how much this Society had done in this respect, he did not know, but he looked forward to a time when the posterity of those who now heard him, would look back on them as we now looked

back to the Pilgrims. After a few remarks upon the vast importance of our mechanical and business connections with the West, and calling upon his audience to do all in their power to rightfully extend and facilitate those connections as intimately concerned with our own prosperity as a State, His Honor closed by proposing the following sentiment :—

The Mechanics of Massachusetts—Who labor not only with their hands, but with their minds ; who are scientific and practical ; their march is onward in the track of improvement, and we bid them God speed !

Air,—New England March.

Fourth regular toast,—

The Judiciary—The balance-wheel of the Constitution—"A terror to evil doers, and a praise to all such as do well."

Air,—L-a-w.

Peleg W. Chandler, Esq. was called upon to reply, and, after a few humorous remarks, setting forth his entire surprise at being selected to respond to this toast, when so many older and more distinguished lawyers were present, he proceeded to demonstrate that the success of the mechanic arts, like that of all other arts, depended upon intellectual efforts ; the difference between the professors of such arts was only in the application of that intellectual labor, and any man who would undertake to foster jealousies between one industrial class and another, on the score of a difference in labor, was false to himself and to society. He closed with this sentiment :—

Agriculture, the Mechanic Arts, Commerce, and the Professions—Belonging to one family, and all depending for success upon labor.

The following original song, by A. J. H. Duganne, Esq. was then sung by Mr. H. Swift :—

THE MECHANIC.

Lift up thy toil-worn hand,
Thou of the stalwart frame, and fearless eye !
Lift proudly now thine iron hand on high !
Firm and undaunted stand !

No need hast thou of gems,
To deck the glorious temple of thy thought,
Thou hast the jewels which thy mind hath wrought,
Richer than diadems !

Thou art our God's high-priest,
Standing before great Nature's mighty shrine,
For the whole world, the glorious task is thine,
To spread the eternal feast !

Even like the Hebrew Chief,
 Strikest thou on the rock, and from its deep
 Mysterious heart the living waters leap,
 To give the earth relief!

Mighty among thy kind,
 Standest thou, man of iron toil, midway
 Between the earth and heaven, all things to sway
 By thy high-working mind!

Thou canst delve in the earth,
 And from its mighty caves bring forth pure gold;
 Thou canst unwrap the clouds in heaven rolled,
 And give the lightning birth!

Thou hast the stormy sea
 Chained to thy chariot wheels, and the wild winds
 Obey the o'erruling intellect that binds
 Their rushing wings to thee!

Thou canst new bands create,
 Where the wild rolling wave no mast'ry owns;
 And the vast distance of opposing zones
 Canst thou annihilate!

Lift then, thy hand to heaven!
 Spread thy toil-sceptre o'er the sea and land,
 Thou hast the world entrusted to thy hand,
 Earth to thy charge is given!

The President next remarked, that the festival of the Association was graced by the presence of a gentleman whom all delighted to see, and who had done signal honor to his country in the course of an arduous mission abroad. He need say nothing more than to propose
The Health of the Hon. Edward Everett!

This toast was hailed with cheers loud, long, and repeated again and again.

Mr. Everett rose in acknowledgment, and spoke as follows:—

Mr. President, and Gentlemen, I thank you from the bottom of my heart for this warm and affectionate welcome. I claim no credit, in my late capacity, for any thing but an earnest desire to perform my duty to my government and country, in the first instance, and to our fellow-citizens, whose business affairs required my official aid. I have had no opportunities, by what may be called splendid achievements of diplomacy, to reflect honor on the country, but I have endeavored, by assiduous attention to the routine of duty, to carry on the public business,—to prevent harm, if I could not do positive good,—and, as far as be-

longed to an individual, to contribute to the general tranquillity. This has been done occasionally, under circumstances of some embarrassment, but not great, and, for all my labors, had they been much more arduous, I should have been amply repaid by the favorable interpretation they have received from my countrymen, and the cordial welcome which has awaited my return.

But something too much of this, Mr. President ; and yet, Sir, I do not propose to speak at any length upon the appropriate topics of the day. They have, as I understand, been treated by the Orator, in a manner to render this superfluous. I was prevented, by indispensable engagements, from being one of his hearers ; but I understand that he discussed the history, objects, and purposes of the institution, with an ingenuity and force, which make any thing else, in that way, unnecessary from any other quarter. I trust, Sir, that it will not be long, before the intellectual banquet, with which he regaled you, will be served up to a still larger circle, through the medium of the press. I may also observe, that my humble testimony to the importance and respectability of the mechanic arts,—to the agency of this Association in promoting them, and to its utility as one of the institutions of the community in which we live, has long since been borne, in a more formal way, at one of your public festivals.

I rejoice to meet you, Mr. President and Gentlemen, on this interesting occasion, and to be able to congratulate you on the prosperous condition of the institution, which, at the close of the half century from its establishment, is entering upon a wider field of usefulness. I am aware, Sir, of the strong temptation to say civil things on an occasion of this kind, and that courtesy is apt to run into adulation. But what one has said at a distance, he may be permitted to say at home ; and, having often avowed abroad, my high opinion of the intelligence, worth, and high character of the industrious classes in America, I believe it would be false delicacy to suppress that tribute in the presence of a body like this, so well authorized to represent their brethren throughout the United States. Sir, I will go farther, and say, that there is, in my judgment, no part of the world, where LABOR, taken in its broadest sense, is organized on a basis as sound and elevated as in New England, or where it unites in so perfect a combination as here,—physical power, mental acuteness, and moral energy and principle. Some confirmation of this remark might be brought from a quarter where no national partiality can be suspected. When the present Emperor of Russia projected the great work now in progress in that country,—the railway

from St. Petersburg to Moscow, a distance of about 450 miles,—he sent two officers of his army as Commissioners to examine the works of the same kind in other countries, particularly in England and the United States. They went first to England, where the railway system is carried to a high degree of excellence. From England, they came to the United States, and, having examined our Great Western Railway, they engaged its builder, Major Whistler, to undertake the construction of that projected by their Emperor. In like manner, an immense contract, amounting, as I have understood, to more than four millions of dollars, for all the locomotive engines to be employed on the road, has been given to Mr. Harrison, of Philadelphia, and his associate. When I had the honor, a year or two ago, to be presented to the Emperor, in London, I took the liberty to ask him how he was satisfied with the American Engineers in his service. He answered, “In the highest degree; that they were persons, in all respects, of the best character; that he had a great deal for them to do, and hoped he should be always able to keep them in Russia;” in which hope, however, I most respectfully dissent from his Imperial Majesty; and express the wish, that when these estimable citizens have honorably accomplished their great undertaking, they will return to their native country, on which they reflect so much credit.

I rejoice, Gentlemen of the Association, that, instead of resting satisfied with what you have done, you are desirous of enlarging your sphere of usefulness. His Excellency, the Governor, who has just addressed us, with a gallantry that adorns the gubernatorial chair, has expressed the hope that the first step may be to introduce the ladies into your hall, at the next anniversary. I claim the privilege of seconding His Excellency’s motion; and I doubt not, that, with these fair associates, you will start with new encouragement and animation in whatever you propose, by way of widening the sphere of your operations. There is a vast field to occupy,—a great work to be done, and the character and wants of the age more and more require that mind should, as much as possible, be infused into matter; and that, whatever is done at all, should be done with increased intelligence and skill; and this effect must be produced through the medium of education.

It is a saying, Sir, ascribed to an ancient mechanician, Archimedes, who may be regarded, so to say, as the Patron Saint of your society,—whose effigy adorns your diploma,—that, “if you would give him a place to stand upon, he would move the world.” Our illustrious patron is supposed to have meant, by this famous remark, that if he could

gain a position on which to establish a fulcrum, exterior to the globe, he could heave it from its place. I am not sure there would not still have been some mechanical difficulties in the construction and management of the lever; and, supposing the achievement practicable, I have ever thought it one of doubtful policy. Philosophers tell us, that the effect would have been to project the great globe which we inhabit into some distant region of adamantite frost and rayless night, with a prospect of eventually falling back into the sun, or, perhaps, some still more powerful centre of a higher system. Now, Sir, the benefits of this "movement" I could never comprehend. It appears to me, it would be a very serious operation, as the Fourth of July Orators say, for the "generations unborn," who would be apt, in that case, to remain unborn an indefinite time longer. I have always been rather glad, that our illustrious predecessor had no chance to work out his theorem. As one of those interested in the result, I never wish to live beyond the reach of either end of Fahrenheit.

But, to speak seriously, in a better and higher sense than Archimedes intended it, he did possess,—and all who follow in his footsteps as intelligent practitioners of the mechanic arts,—do inherit and possess in the application of those arts, the station, the fulcrum, and the lever, by which the world has been, is, and is to be most powerfully and beneficially moved, and never so much as at the present day. These arts move the world materially, as they give wheels of fire to our vehicles on land,—the wings of the wind to our vessels at sea,—the force of giants to the thousand arms of labor. They move it intellectually in every department of life. If they construct to-day the cradle of the infant,—the log cabin of the settler,—the horse shoe for the humble animal who draws your burdens through the streets,—they furnish the seaman to-morrow with a chronometer which teaches him his place on the pathless ocean,—they put an instrument in the hands of the astronomer with which he sounds the bottomless depths of the eternal heavens,—and, by the art of arts, they impress upon a tablet to be read by all nations to the remotest time, the inspirations of undying genius. And is this all, Mr. President; is there to be no richer fruit from this multiplication of physical and intellectual resources,—these facilities of communication,—this enlistment of all the powers and elements of nature in the service of man,—this emulous cultivation of the mental faculties, by the aid of the mechanic arts,—shall it produce no effect on the moral condition of society? I will not admit such a cheerless conclusion. I rejoice to believe that there is an indissoluble bond, knit by

the Great Creator himself, between the moral and the intellectual nature, which makes it impossible,—whatever may happen in the individual case, that in the general operation,—the cultivation of the mind should not lead to the elevation and improvement of the character.

For this reason, it is, Sir, that, whatever may be done by your Association with a view to an improved training of those who are to take your places,—though its immediate object may be a superior qualification for the active duties of life,—it will have another and a better effect, in raising the standard of conduct, and purifying the morals of the community.

Be pleased, Sir, to accept my renewed thanks for your cordial welcome and flattering attention, with my best wishes for the prosperity of the Association.

At the conclusion of Mr. Everett's remarks, the band very appropriately played, *Home, Sweet Home*.

The Chair then announced the Fifth regular toast,—

Our Representative in Congress—By unobtrusive excellence in private life, winning the confidence of all—by faithful discharge of public duty, commanding the respect of all.

This toast was received with much cheering, and the Hon. Robert C. Winthrop, in reply, spoke to this effect :—

I heartily wish, Mr. President, that I had replied to the sentiment, which went begging for a response a few minutes ago, in honor of the Judiciary ; not because I acknowledge the justice of the rebuke, which was seemingly administered to me, by the President of the Common Council for not doing so, or count myself guilty of any *laches* in that regard ; nor yet, certainly, because I am not most deeply grateful, for the compliment, which has now left me no apology for silence ; but because, I should then have escaped the discouragement of following in the immediate wake of my honored and excellent friend, who has just taken his seat, (Gov. Everett,) and should have had something to break the fall between his rich and sparkling eloquence, and my own humble commonplace.

I am glad, however, of an opportunity, at any time, and under any circumstances, of paying my feeble tribute of honor and of gratitude to the mechanic arts, and to those who are engaged in them. It is impossible to do them too much honor. No one can rise up in the morning, or lie down at night, without incurring a debt of grateful acknowledgment to the industry, and skill, which have furnished him with the roof which shelters him from the elements, the bed upon which he takes his rest, and the garments in which he goes forth again to

his occupation, or enjoyment. This was the great original vocation of the mechanic arts,—to supply shelter, and clothing, to the human family; and this still continues to give employment to the great mass of their followers. It is a striking fact, that not less than *two millions* of the laboring population of Great Britain alone, are at this moment, employed in what are called the textile Manufactures,—in supplying the world with the materials of dress; and that, without including the thousands and hundreds of thousands, who are engaged in making up those materials, and distributing them to their numberless wearers. Regarded in this relation only, the mechanic arts may claim a rank in the scale of human labor, second only, if second at all, to that Art of Agriculture, which furnishes the world with food.

But when we reflect upon our indebtedness to the Mechanic, for so many of the conveniences, and comforts, and elegancies of life, as well as for its mere necessities; when we remember that without him, Agriculture itself would have no implements, Commerce no vehicles, or store-houses, Literature and Education no books or printing press, Science no instruments, Patriotism no monuments, Piety no altars,—the full sum of our obligation exceeds all possibility of overstatement.

And equally impossible is it, to exaggerate the value of those improvements in the mechanic arts, which have signalized the half century, of which this is the crowning Festival. The fifty years which have now elapsed, since the foundation of your Association, have been eminently *the age of mechanic art*. The achievements which have rendered this period most memorable, the names which are most deeply and indelibly engraved upon the tablet of its history, are the names and the achievements, of Mechanics. Who is there, who has done as much to immortalize himself, or the period in which we live, as JAMES WATT, for example, the improver and finisher, I had almost said, the author, of the Steam Engine? I could not but regard it, Sir, as a most happy coincidence, that you had selected as your orator on this occasion, one who is not only a grandson of your first President,—the patriot Mechanic, *Paul Revere*,—but who is himself engaged in precisely the same branch of Mechanic industry, in which the illustrious artisan whom I have named, prepared himself for his masterly inventions.

James Watt, like your orator, was a maker of mathematical instruments. He was once prohibited from exercising his vocation in the city of Glasgow, because he had not gone through a regular novitiate, and obtained the freedom of the craft. He was even refused the privilege of opening a humble work-shop there for prosecuting his experi-

ments. The University of Glasgow, however, we are told, (and I hope it will be remembered to the honor of universities,) came to his aid, granted him a chamber of their own, and gave him the appointment of their mathematical instrument maker. And the accident of having a model of a steam engine to repair, for the professor of natural philosophy, was the origin of all his success. It was eminently appropriate, Mr. President, that the praises of the great era of mechanic art, which the history of your Association embraces, should have been pronounced, as they ably and eloquently have been by one, who is a pupil in the same school, in which the master-spirit of that era was educated.

Mr. Winthrop here proceeded to speak of the improvements of modern art, as manifested in the architecture of our own city, and contrasted the old triangular warehouse in Dock Square, bearing the date of 1680, the only remaining memorial of the buildings of our fathers,—with the magnificent granite blocks, which are now rising at every corner of the streets.

In concluding his remarks, Mr. Winthrop referred to the distinguished part, which the mechanics of Boston played in securing the establishment of our existing national government. I cannot but remember, (said he,) that it was at the same old Green Dragon, in which your institution took its rise, (a dragon evidently not of the same genus with that which St. George slew), and by the same mechanics who were your original officers and members, that resolutions were adopted and steps taken, which turned the scale in favor of the adoption of the Constitution of the United States. I will not recount the familiar details of that memorable meeting. Your late respected member, whom we all miss from his accustomed place here, to-day, (Benjamin Russell,) has often told me, that he had the original draft of these resolutions in his possession.

I trust it will be procured as a precious deposit, for that new Hall of yours, which is soon to add another ornament to our city. Your archives will never contain any thing more honorable to Mechanics, or of greater historical interest and value.—Sir, I am glad to remember, in this connexion, that the National Government has recently given some evidence, of a revived regard for the Arts and Sciences.—I do not refer to this action, upon any vexed questions of Tariff and protection. Its course in the immediate future on these subjects, seems too uncertain, to give us any satisfaction in alluding to what it has been, or is now. But it has done some things which are beyond reconsideration or recall. It has sent out an Exploring Expedition ;

the results of which are now before us, in four or five beautiful volumes, which are not more creditable to the science and enterprise, which conducted the expedition, than to the mechanic arts, which have recorded and illustrated it.—It has instituted a Coast Survey; one of the scientific parties connected with which, is at this moment encamped on the neighboring Blue Hill. It has set up a Magnetic Telegraph; one of the seven wonders of the modern world, by which intelligence is communicated with the rapidity of thought, and which seems able to accomplish even that vision of a Midsummer Night's Dream, in which Robin Goodfellow promised the King of the Fairies, that "he would put a girdle round about the earth in forty minutes." It has established an Observatory too; by which we can hold a sort of Telegraphic communication with the skies, and inquire of the planets whence they are coming, and whither they are going. Congress, indeed, cannot claim any great credit for this last work. The branch to which I have the honor to belong, certainly, knew not what it did; or it would never have assented to such an act. The appropriation was smuggled through by a kind of pious fraud. Had it been asked openly for an observatory, it would have been denounced on all sides as unconstitutional. What has the General Government to do with the motions of the stars, or certainly with the motion of any stars, but those upon its own banner, or the lone star, which is about to be annexed to it? But a depot for the charts and instruments, connected with the Coast Survey, and the Exploring Expedition, is a different idea, and under that name a well built, and well appointed observatory is now in successful operation at the Capitol.

And lastly, Mr. President, there is the Patent Office; in which, by recent regulations, there is a constant Mechanics' Fair kept up, almost equal to some of those which have been exhibited, under the auspices of your own Association; and from which is annually issued a report, containing an account of the most recent mechanical inventions, and improvements of our own and other countries, together with the latest statistics, both of Agriculture and of Commerce. This report furnishes an admirable illustration of the common interests of all branches of American labor, and of the cordial fellowship which ought to exist between those engaged in them. And I will venture, in allusion to it, to propose as a sentiment:

"The most complete division of labor, and the most cordial union of all laborers, manual, mental, and mixed,—principles alike essential to the progress of improvement, and to the perfection of the social state."

Regular toast,—

The Army and Navy of the United States—Worthy defenders of their country's rights, and glory,—unsullied in honor,—unblenching in danger.

Commodore Nicholson of the U. S. Navy, spoke in reply, for a moment or two, but his remarks were inaudible at the table of our reporter. His sentiment was,—

Success and happiness to the members of this Association.

The Militia of Massachusetts—like an umbrella in fair weather,—not appreciated when the sky is clear,—but eagerly sought when elements clash.

Air,—Yankee Doodle.

Hon. John G. Palfrey, who was called on to respond, made some brief remarks and gave,—

The Massachusetts Charitable Mechanic Association—Like the Commonwealth, whose name it bears, there is no decay in its contriving head, and its strong arm, its warm heart, and its generous impulses.

Glee,—Life's a bumper.

Commerce—The Magnetic Telegraph, along whose wires runs, from nation to nation, the electric current of peace, and concord, and mutual good-will.

Manufactures—The twin sister of Commerce,—like the Siamese Twins, they cannot be disjoined without death to both.

The President read the subjoined letter, from Hon. Abbott Lawrence :

Boston, September 30th, 1845.

Dear Sir: I have the honor to acknowledge an invitation of the "Massachusetts Charitable Mechanic Association," to attend their Triennial Festival, and first Semi-Centennial Celebration, on Thursday next. I regret very much, that a business engagement out of the city, made a fortnight since, will deprive me of the satisfaction of being present on this interesting occasion.

I pray you to believe, that I entertain a deep interest in the prosperity of your Association, and hope that the next half century of its existence, may be productive of as much benefit to mankind, as the one which is just now closing. The experience of the past, and the present prosperous condition of the Association, must prompt its members to strengthen the foundations, that posterity may acknowledge, that an Institution so wisely established by our Fathers, has not suffered in the hands of their sons. I beg leave to offer the following sentiment, and remain, dear sir, very faithfully your obedient servant,

ABBOTT LAWRENCE.

To George G. Smith, Esq., President, &c :

The six living original members of the Massachusetts Charitable Mechanic Association, viz : Henry Purkitt, Peter Mackintosh, Oliver Johonnot, Samuel Perkins, James Phillips, and Daniel Messenger—May the evening of their days prove as happy to themselves as their meridian has been useful to mankind.

After the reading of this sentiment, the Band played *Auld Lang Syne*.

William Eaton, Esq., Vice President of the Association, said, that on behalf of Mr. Peter Mackintosh, an original member, now 88 years old, he would offer the annexed toast, which he had received in Mr. M's own hand-writing :—

Mechanic Apprentices—The rising generation of *master* mechanics,—the future members, we trust, of this Association. In all the transactions of life, may they ever be guided by our excellent motto, namely : " Be just and fear not."

Mr. Yerrington, President of the Mechanic Apprentices Library Association, responded to this toast in a few well chosen observations, in the course of which, he referred to the Orator of the day as a former member of that society, and then proposed,—

The Orator of the Day—Born of the Child, he has returned to the Parent ; may his zeal and interest in the one, be equalled by his career of usefulness in the other.

The health of the Orator of the Day.

Was then proposed by the President, and drunk after three cheers.

Mr. Lincoln briefly acknowledged the compliment, and gave,—

Our New Hall upon the Boott Estate—The present effort for its erection will not prove *bootless* if our members are actuated with the spirit and energy of their forefathers.

Agriculture and Horticulture—The first a healthy nut-brown maid ; supporting with vigorous arm, her more elegant and graceful sister,—a lovely pair—handmaids of God's goodness :—scattering wide with ever bounteous care, his choicest gifts to man.

Col. Marshal P. Wilder, President of the Massachusetts Horticultural Society, in a few words, replied to this sentiment, and begged leave to propose,—

The Massachusetts Charitable Mechanic Association—A tree of half a century,—its trunk sound, vigorous, and healthful,—its grafts full of rich fruits. May its branches spread wider, and its roots strike deeper with each successive year ; and may those who partake thereof, remember with gratitude, the hands that planted and trained it.

Song by Mr. Swift.—*The Musical Wife.*

The Mechanics of Salem—As ingenious as witches,—as industrious as bees.

A. J. Browne, Esq., Vice President of the Salem Mechanic Association, spoke eloquently upon the elevated position of the laboring classes in Massachusetts, and the all-powerful influence of education in producing a true level amongst all the people. He gave, as a toast,—

Education among Mechanics—The enlightening of their minds, and the refining of their tastes, has been one of its consequences ; the habit of reflecting and acting more for their true interests has been another.

Glee,—Merrily live We.

The United States Revenue Service—Its Cutters sever the chain of fraud—and afford protection to honest trade.

Captain Josiah Sturgis, of the Revenue Cutter Hamilton, detailed some interesting particulars of his early life, and then gave,—

The Mechanics of Boston—Foremost in the defence of civil rights, pre-eminent in the arts, and in all that adorns social intercourse. Like the caged lion, they have risen by their own strength.

The President called for a speech from Colonel Russell, of Salem, Ex-President of the Salem Mechanics Association, but he, after disclaiming his ability to address any extended remarks to an audience like the present, said he would recall to the recollection of members one of their former Presidents, under whom he served his apprenticeship. He gave,—

The Memory of Benjamin Russell.

This was drunk standing,—the Band playing Pleyel's Hymn.

The Legislature of Massachusetts—short sessions,—short speeches,—few laws and good ones.

The following sentiment from Hon. S. H. Walley, Jr., was read in reply,—

This Association—The skill of its members as evinced in the perfection to which they have brought the mechanic arts, is settled beyond question. We rejoice to learn the success of their endeavors to enrich and adorn the temple not made with hands, the mind of man.

The Good City of Boston—Our Home; peace be within her gates, and prosperity within her palaces.

Our City Government and the Great Question before it—May the contest between pond water and river water, although likely to be somewhat long, and not altogether without spot,—remain nevertheless, undisturbed by prejudice or passion, till it settles down into a clear and satisfactory result.

Our Original Members.

Air,—He's gone on the mountain.

Our Deceased Members—Heroes of industry,—their work on earth is finished—peace to their souls,—honor to their memories.

Glee,—Peace to the souls of the heroes.

The Mechanics of Maine—As good timber as any in the shop.

The Mechanics of New Hampshire—Industrial granite,—hard and unyielding,—but of such materials, Art constructs imperishable monuments.

The Mechanics of Lowell—Peaceable folks,—but no ways disinclined to a Milling Match when needed.

Letters from the Presidents of the Mechanic Associations in Maine, New Hampshire, and Lowell were received, but time did not admit of their being read.

Mr. Leander Streeter, late Editor of the Richmond Star, was called out by a sentiment, and duly responded, and offered some remarks upon

the position sustained by Massachusetts with regard to various prominent topics of the day. He proposed,—

Toddy Tumblers and Punch Pitchers—May their devotees take heed that they do not become tumblers and pitchers themselves.

Mr. Swift next sung a medley song, which elicited great approbation.

The Chair announced the following sentiment, as having been sent in by William Beals, Esq.,—

Boston Mechanics—They are capable of turning their hands to any thing, from laying a stone wall to filling the Mayor's chair.

Mr. Eaton, Vice President, gave,—

Our Contemplated Hall—Ere long it is destined to rise, and have its capstone deposited,—Then, and not till then, will our desires be accomplished.

The Chair proposed a toast complimentary to the Militia, to which Captain Kurtz, of the Washington Phalanx, in reply, offered the following,—

The true grandeur of Nations—In time of peace to be prepared for war—the opinion of Fourth of July orators to the contrary notwithstanding.

The following original song was prepared for the occasion, by N. W. Coffin, Esq.—

SONG OF THE CRAFT.

Give us a song, the craftsmen cried,
A brave high song to-night,
That shall fill our souls with a living tide
Of glory and delight.
We ask not for a martial peal,
The pomp of pride and power,
But a measure that rings to the clink of steel,
To grace the festal hour.

Spirits of those whom the world's renown
Enshrines in a casket of light,
Lay by the harp and the golden crown,
To join with us to-night ;
With us to-night, the hallowed names
Of Franklin, and Fulton, and Watt,
Arkwright, and Whitney, and Davy, whose fame
Is the pride of palace and cot.

Noble is he whose sinewy hand,
The instrument of art,
Grasps with a high and firm command,
With a strong and a merry heart :

The sound he rings from the metal shaft,
 His patient skill hath wrought.
 Is a music sweet to the sons of craft,
 The cadent measure of thought.

What is a king with his courtly train ?
 The king in his marble hall !
 Measured by him who, through pleasure and pain,
 Lifts upward the granite wall.
 The trowel shall live when the sceptre is gone,
 And the monarch sleeps in shame,
 The artisan builds in the deathless stone
 To himself a pillar of fame.

Then swell the song both loud and long,
 With willing hearts to-night,
 And let each craftsman true and strong,
 Drink of a pure delight;
 It shall not be a martial peal,
 Speaking of pomp and power,
 But a measure that rings to the clink of steel,
 To grace the festal hour.

Mr. Lincoln called out the author of the song by a humorous allusion to his name, hoping it would be long before it was put under ground.

Mr. Coffin responded, and said he had no idea that he should be ex-humed on this occasion, but he rejoiced in the opportunity of being present. He would propose,—

The Mechanics—The noblest instruments of God in the elevation of man ; and the mechanics' wives and daughters—the noblest instruments of God in the elevation of the mechanics themselves.

Mr. Streeter, after some appropriate observations, proposed,—

Old Massachusetts and Old Virginia—May God bless them both !

The Chair begged leave to offer,—

The health of Abbott Lawrence—A prince among merchants.

This was drunk with much applause, and the President then retired, leaving Mr. Eaton in the Chair.

Mr. Eaton immediately gave,—

The health and happiness of George G. Smith, our President.

Which was received with loud applause.

Song by Mr. Swift,—*What are mortals made of ?*

Sentiment by James Wentworth, Esq.,—

The contemplated Mechanics' Hall—May the friends to the project, who have so nobly contributed towards its consummation, *out of doors*, be emulated, in the same spirit, by those *within*.

By William Stearns, Esq.,—

The Fourteenth Triennial Festival—May it be held in a splendid new hall, owned by, and dedicated to, the Massachusetts Charitable Mechanic Association.

After a farewell air from the Band, the company adjourned.

Thus passed off the First Semi-centennial Anniversary of the Association. The emotions awakened in the minds of members, by the exercises of the day, are of a nature not easily to be effaced from remembrance, nor likely to be wholly unprofitable in maintaining the interest of the public in the well-being and prosperity of the institution. The occasion was one of unmingled satisfaction to all; and no higher wish need be entertained, than that those which are to follow may partake of the same character.

AN

ADDRESS

DELIVERED BEFORE THE

THE NEW YORK
PUBLIC LIBRARY
P 27228
ASTOR, LENOX AND
TILDEN FOUNDATION
1898

MASSACHUSETTS

CHARITABLE MECHANIC ASSOCIATION,

ON ITS

FOURTEENTH TRIENNIAL FESTIVAL,

OCTOBER 5, 1848,

BY WILLIAM SCHOULER,



★ MASS. HIST. SOC.

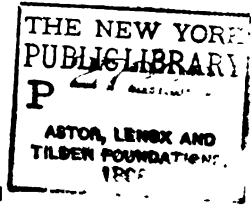
BOSTON:

PRINTED BY DUTTON & WENTWORTH, No. 37, CONGRESS STREET.

1848.



AN



ADDRESS

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

ON ITS

FOURTEENTH TRIENNIAL FESTIVAL,

OCTOBER 5, 1848,

BY WILLIAM SCHOULER.

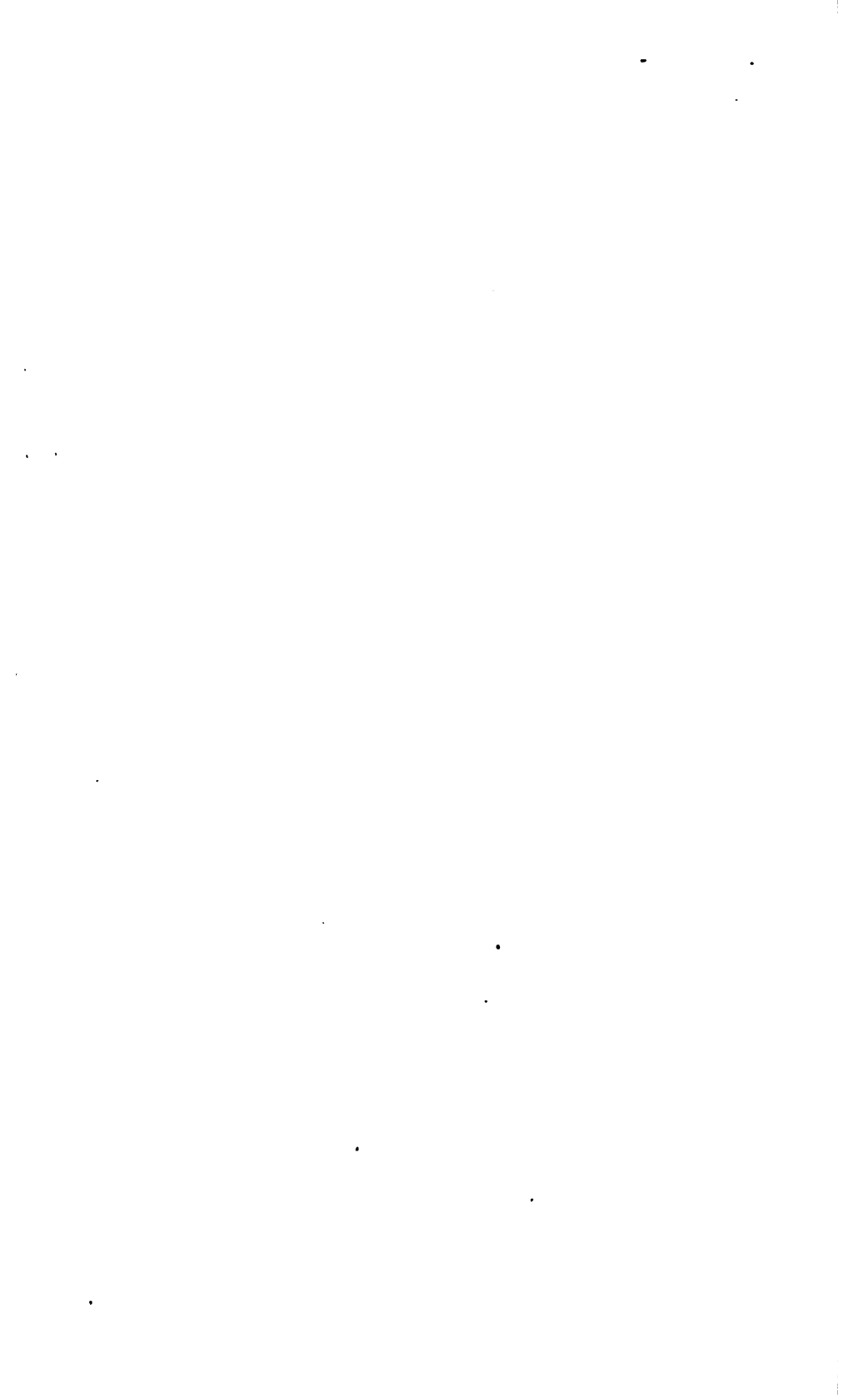
PUBLISHED BY ORDER OF THE ASSOCIATION.

BOSTON:

PRINTED BY DUTTON AND WENTWORTH,

No. 37, Congress Street.

1848.



BOSTON, OCTOBER 10th, 1848.

TO COL. WILLIAM SCHOULER,

DEAR SIR :—At a meeting of our Association on the day of the FOURTEENTH TRIENNIAL FESTIVAL CELEBRATION, the undersigned were appointed a committee to transmit the following Vote of Thanks, in the sentiments of which permit us, as individuals, to express our entire concurrence, and hope you will grant the request therein contained.

We remain,

Very truly your friends,

HENRY N. HOOPER,
BILLINGS BRIGGS,
OSMYN BREWSTER, } COMMITTEE.
JOHN KUHN,

At a meeting of the MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION, held October 5th, 1848, on motion of the Honorable JOSEPH T. BUCKINGHAM, it was unanimously

VOTED, That the thanks of the Association be presented to our friend and brother, WILLIAM SCHOULER, for his beautiful and very acceptable Address delivered by him this day.

VOTED, That the President, Vice President, Treasurer, and Secretary, be a committee to communicate the preceding vote to Col. Schouler, and request a copy for publication.

BOSTON, OCTOBER 17th, 1848.

TO MESSRS. HENRY N. HOOPER, BILLINGS BRIGGS, OSMYN BREWSTER, and JOHN KUHN, Esquires.

GENTLEMEN :—I have received your kind and friendly letter of the 10th inst. transmitting the votes passed on the 5th inst. by the MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION, requesting a copy for publication of the Address made by me on the occasion of our late Triennial Anniversary.

I feel highly honored by the votes of the Association, and am sincerely gratified by the kind manner in which you have conveyed them to me. No one can have a more humble opinion of my Address than myself, yet I cheerfully comply with the request of the Association, and transmit herewith a copy of it for publication.

I am, Gentlemen, your friend and brother,

WILLIAM SCHOULER.



A D D R E S S .

UPOX me, an humble and comparatively new member, has fallen the pleasant duty of addressing this association at this time.

Three years have passed since, upon an occasion like the present, we met to mingle our hearts and our affections, and to devote one day in commemorating the objects for the advancement of which our society was formed.

In the eye of Omnipotence, these three years are but as a moment of time. To us, the creatures of his breath, they are a goodly span.

Nor have these three years been unimportant in the history of nations, or in solving the problem of the true character and condition of man. Many and mighty have been the changes they have witnessed. Thrones and dynasties, which were believed to have their foundation on an eternal basis, and systems of government, which had grown venerable with age, around which the ivy of centuries had become entwined, have tottered and fallen.

Revolution after revolution has swept over the older nations of the earth, and kings and princes have become outcasts from their countries, and exiles from their homes.

War, with its countless miseries, at home and abroad, we have witnessed. The streets of cities have run red

with blood; and blackened walls, and broken roofs, and prostrate dwellings, have marked the advance of hostile armies. These, and the spreading fields of yellow grain, trampled into mire by the foot of horse and the march of man, remain, Desolation-like, to tell of battles lost and won.

Famine, likewise, with her gaunt and ghastly brood, has filled her charnel-houses with victims from among the children of the poor. A mysterious disease, of whose origin or character no man knoweth, has blighted and destroyed the food of a nation. When harvest-time came round, in place of an expected increase, a putrid mass was found. The earth withheld her accustomed bounty, and blank despair laid hold of the people's hearts. Literally were the words of Scripture fulfilled, "Blessed shall he be who taketh thy children and throweth them against the stones."

It has been our fortune to be only witnesses at a distance, not living actors in these scenes. Few, few indeed, have been our sufferings; many our blessings. The seat of war has been far distant from us, and the broad ocean, with its ever-moving flood, has separated our country from the abodes of famine.

It is proper, for these and for other reasons, that we should meet and rejoice, not, indeed, in the spirit or with the purpose of the Pharisee, to thank God that "we are not as other men are," but in that true spirit of Christian love and thankfulness, that our lines have been cast in pleasant places; that seed-time and harvest have been blessed to us an hundred-fold; that the labors of the husbandman and of the mechanic have been so abundantly crowned that we have had whereof to eat and to drink and wherewithal to be clothed. We should rejoice that

the government, which our fathers in their wisdom established, is one which seeks its support, and derives its vitality, from the people. Thus established, it is healthy, strong, and vigorous, having no enemies within, and fearing none from without.

Our fair and beautiful city, the home of our choice and of our affections, has made, since last we met, an advance movement. Her portals have been enlarged, and her whole appearance improved. New blocks of buildings rear their granite fronts, and new habitations stretch out on every side, and have become the pleasant homes of a new population. School-houses, those nurseries of the youthful mind, and churches, with lofty spires, which point eternally to the home of God beyond the skies, have risen with them. Our wharves are thronged with vessels, which bear upon the bosom of Old Ocean a successful and prosperous commerce. New lines of railroads, stretching into the rich interior, awakening the deep solitudes of nature with the shrill whistle of the locomotive, bring the wealth of teeming fields and of fertile valleys to our very doors. And water, that "nectar of the gods," man's best beverage, we are soon to have in happy abundance distributed to every dwelling.

The massive reservoir which crowns our highest summit, resembles the heart of a healthy man, while the mains and pipes, radiating therefrom through every street, and lane, and court, are the veins and arteries through which is soon to flow a new life-current of our people.

These are a few of the improvements in the blessings of which we all partake, and in which the mechanics of Boston may feel an honest pride. They represent, in some degree, the glories of our arts, and the munificence of our labor and enterprise.

The three years just past have witnessed the continued prosperity and usefulness of our association. Its roots have struck deeper in our affections, and its branches have given a wider shelter to the widow and the fatherless. Its growth has been healthy and vigorous, "like a tree planted by the water-side."

Under the patronage of this association, another mechanics' fair has been holden, at which were exhibited the wonders of inventive genius, and the thousand products of industrious and intelligent labor. That principle of intelligence by which the presence of one thought recalls another is beautifully illustrated in these exhibitions of art. The variety of articles exhibited shows the infinitude of invention, and that which was the wonder of to-day is eclipsed by the still greater wonder of to-morrow.

It is a hopeful sign of the times that the interest felt by the people in these exhibitions continues unabated. The crowds which filled the halls during the last exhibition give evidence that our people appreciate the value and importance of the mechanic arts.

Were these exhibitions merely got up to satisfy an idle curiosity, or for a profitable money-speculation, they would not be altogether without their good results. But such are not the purposes for which they are held. Their chief purpose is to create, as it were, a love of the arts, and to vindicate the true nobility of useful labor.

The human mind is so constituted that inward impressions are made from outward objects. Hence the value of a good example, and the evil of a bad one. The eye is the medium through which the mind gains a knowledge of the world around us.

Who, then, can calculate the beneficial effect which exhibitions, like those to which I allude, must necessarily have

upon a community. If, as it is said, Newton first conceived the true theory of gravitation from having seen an apple fall from a tree, is it not fair to presume that our exhibitions have created new thoughts, and have been the means of reproducing new and wonderful inventions which had else not been produced? They have been, we have every reason to believe, like the good seed mentioned in the parable, or the bread cast upon the waters.

Considering the subject in this light, I have been led to inquire, why there might not be permanently established, in this city, a hall devoted exclusively to the reception of new and valuable inventions in the mechanical sciences.

Were an institution of this character once begun, in time it would become as large as the patent office in Washington; for New England is the mother of American invention, as she is the chief seat of the mechanic arts.

With a hall or institution of the character I have named, we should have an illimitable fund of useful amusement and of scientific study. It would be a school of art, of the beneficial effect of which no one can doubt.

The great distance at which New England is from Washington, renders it impossible for our mechanics and enterprising young men to avail themselves of the accumulated and accumulating wonders of the Patent Office. For general purposes of study, and as a means of reproduction, the models of inventions at the Patent Office in Washington are of little or no value. They might as well be sunk in the Potomac. They are kept to be looked at, like stuffed birds and monkeys in a museum. They are as mummies, dead, and useless, and excite far less attention from nine tenths of the visitors, who, for fashion's sake, or to satisfy a morbid curiosity, go there, than the war-blud-

geon of a South Sea Islander, or the tooth of a sperm whale.

May we not, my friends, hope that, if by no other means, an institution, like the one I have spoken of, can at present be founded, one may be connected with the new school for the study of mechanical science, established at Cambridge within the last year by the splendid munificence of one of our most distinguished and respected citizens?

But, without dwelling longer upon preliminary or incidental questions, I come at once to the main subject of my Address, namely,—

THE MECHANIC ARTS AN AGENT OF CIVILIZATION, AND THEIR RELATION TO OUR OWN COUNTRY. I have been led to make choice of my subject, from the fact that, upon an examination of the addresses which have been delivered before our association, I find it to be almost the only proper and legitimate topic which has not been heretofore discussed.

The subject is one intrinsically important, and, in the discussion of it, I shall endeavor to give to it a practical bearing. It presents a wide field for investigation and reflection.

The almost limitless extent of our country; its variety of climate, soil, and production; its vast mineral resources; its extensive forests, and its gorgeous sea-like prairies, are evidence of its capacity to support a dense population. No land can equal it in lakes, and rivers, and mountains.

Our people are remarkable for their general thrift and enterprise; their desire for learning; their liberal support of schools and colleges; but, above all, they are remarkable for their love of political and religious liberty.

We have three millions of square miles of territory. Its

shores are washed by two oceans. It is capable of supporting in abundance every human being now living on the face of the earth. The mind of man can hardly grasp, at one attempt, the full extent of our possession. The twenty millions of civilized men in the thirty states of this Union, are scarce sufficient, if united in one general chorus, to awaken the solitudes of some of our extended valleys. In relative proportion to the whole country, they are but as a small gnat on the back of an elephant!

During the two centuries we have held possession of this vast territory, although we have increased beyond any other nation, yet we have hardly gone beyond the Atlantic sea-shore. We have but pricked the shell. We have not ascended the highlands in the distance to view the rich valleys which lie beyond them.

Starting in early spring-time to reach our western boundary, the traveller from the east would, ere he reached his destination, find himself overtaken by the snows of winter, amid the mountain ravines of Oregon. If wise, he would encamp till the spring flowers came again, and then continue his journey, fortunate if he reached the farthest extremity of our country ere the winds of winter began again to blow.

It is to this glorious heritage of ours that European emigration points. Hundreds of thousands come to us every year, and yet, like water poured upon the sand, they soon become absorbed in our immensity.

It is this land, "of all the lands the best," that opens the widest range for the display of mechanical enterprise and invention that civilized man ever saw. Now what element of civilization can be named equal to that of inter-communication or commerce? What stronger element than that to bind together the union of the States?

It has often appeared to me, when reflecting upon the subject, that great inventions have always come in the right time. It was peculiarly so as regards our own country. After the Revolution, we found ourselves in possession of a rich inheritance. We bound ourselves together as one nation; we adopted one constitution; we established one republican form of government. Nothing was more absolutely necessary, in order to make the experiment of the government on so extended a scale successful, than that the people should have confidence in one another, and should know one another: in a word, that they should cultivate the sentiment of nationality. Almost at this moment, that wonderful invention of the steamboat was made. Thus science and mechanism, by giving to the world the steamboat, gave to the American union its greatest element of strength.

Consider that region of country known as the Mississippi valley. It contains, at the present time, about eight millions of people; yet there are hundreds of thousands of acres in it on which the foot-print of a white man was never seen. In some of the most densely populated western states, thousands upon thousands of acres of the primeval forests yet stand, and the woodland flowers "blush unseen."

The average of population to the square mile is not more than six, while here in Massachusetts, it is full one hundred, and yet we do not complain of being weighed down by a superabundant mass.

The Great West, however, is becoming settled. Its waste places are being made glad and to bloom and blossom as the rose.

To what particular agency, aside from the fertility of the soil, the salubrity of the climate, and the cheapness of the

land, is to be attributed the rapid emigration to, and settlement of, the west? Why, beyond all question, to the successful application of steam-power to river navigation,—that wonderful and magnificent development of mechanical science and art.

I have spoken of this invention as being an agent not only of civilization but of national union. The whole history of western settlement is illumined with the fact. This invention “annihilated time and space;” it brought the distant parts together; and it made the dwellers on the banks of the upper Ohio neighbors to the cotton and sugar growers on the Tennessee and the Mississippi. In effect, it changed the currents of the western rivers, and made them obedient to the will of man.

It was the one thing wanted; without it, the immense rivers of that region would never have been available as the highways of successful commerce. It was an invention peculiarly adapted to western navigation, and from it is to be dated the settlement and glory of our western world.

The dash of the paddle-wheel waked the enterprising spirit of our people, and the puff of the steam-pipe was heard in Europe. With it, arose the star of Western Empire, and men hailed with glory and delight its radiant brightness, and followed wherever it pointed the way.

The dwellers on our Atlantic seaboard, wearied with toiling upon a hard and ungenerous soil, sold off their farms, and, with their wives and children, scaled the rugged sides of the Alleghanies, and plunged into the wild forests of this new and glorious region, which the genius of mechanical invention had laid open to the use of man.

They came from across the ocean, from England, and the “lowlands of Holland.” The forest gave way before the axe of the settler, and let in the blessed sun to warm

the earth, and "to satisfy the desolate and waste ground, and to cause the bud of the tender herb to spring forth;" to forever dispel the savage gloom and terrible solitude with which the land had been enshrouded since the birth of time.

The invention of the steamboat did more. It was not only a living, active agent, in western civilization, but it saved the settlers in those regions from being forever subject to a race of semi-barbarous boatmen.

The ever-ceaseless current of our western rivers, flowing onward to the ocean, rendered sailing vessels of no avail, and, until the introduction of steamboats, the rich products of those regions were floated to the seaboard on flat boats which drifted, like the ark of Noah, upon the face of the waters wherever the current might carry them.

Six months was considered a fair voyage from the falls of the Ohio to New Orleans and back again. The labor required was immense. On the return voyage, the boat had to be warped or polled up the whole distance,—fifteen hundred or two thousand miles,—against the current of two such mighty rivers as the Ohio and the Mississippi.

It was a dangerous and uncertain mode of navigation. The character of the employment engendered a spirit of wild recklessness and insubordination among those engaged in it. The boatmen were a peculiar race of men. Possessing some of the superior traits of character of the white race, they had likewise many of the characteristics of the red race. The desire for revenge, a love of unrestrained freedom, a contempt of law and civil authority, were leading traits of character. They lived in a world of their own, far removed from the humanizing influences of civilized society. It was a gorgeous and splendid world. They sailed amid islands and through a country clothed

with a richer verdure, than poet, in his wildest fancy, ever pictured. The winds that swept by them were laden with the odor of a hundred thousand flowering catalpas and magnolias, richer in perfume than the scented gales from "Araby the blest."

There was a wildness, a romance, in the boatman's life, well calculated to take captive the imagination of the western youth, and to lead him from those pursuits by which alone a new country can become prosperous and happy.

It requires but little effort of the imagination to understand the unfavorable influence which a race of men, like those I have described, must necessarily have exerted upon western settlement and civilization. Few of them had homes or settled habitations. By day, they floated lazily upon the surface of the mighty waters, and their nights were passed at some lone settlement, at a lagoon, amid wild revelry and dissipation.

These were the sole connecting links between the seaboard and the great interior heart of the west. They were the sole agents by which the commerce of that rich and inexhaustible region could find its way to the seaboard and a market. While this rude, dangerous, and slothful medium of intercommunication alone was available, the settlement and prosperity of the west would be of a like character.

But a new day dawned upon the world. A new era began. Those two poor mechanics, Watt and Fulton, arose. They carried, in their brains, an invention against which the waves of ocean, even when tempest-tost, could not prevail, and the spring currents of a thousand rivers were but as the weight of a child's hand.

From the introduction of steamboats upon the western

waters, the settlement and improvement of the country have been daily going on. Its population has doubled every ten years. Up to the year 1817, the period of the first introduction of steam upon the Mississippi, the whole commerce from New Orleans to the upper country was transported in about twenty barges, of an average of 100 tons each, and making but one trip a year. The number of flat boats on the Ohio was estimated at 160, carrying, say, 80 tons each. The total tonnage was estimated at between 6,000 and 7,000 tons.

The Mississippi River and its tributaries drain the great central valley of the North American continent, embracing twenty-one degrees of latitude and fifteen degrees of longitude, eleven entire states, parts of two others, and two territories. It comprises, within its limits, 1,200,000 square miles, or 786 millions of acres, and nearly, if not quite, one half of the population of the United States, although, at the time of the invention of the steamboat, the whole of that vast region contained less than a million and a half of inhabitants.

In 1834, the number of steamboats on the Mississippi and its tributaries was 230, measuring about 39,000 tons.

In 1840, the number was 285, measuring 49,800 tons.

In 1842, the number was 450, measuring 90,000 tons.

In 1843, the number was estimated at 672; tonnage, 134,400.

The number of steamboats now upon the western waters is about 1,300, with a tonnage of 260,000 tons, the net value of which is about \$18,000,000.

In addition to this vast number of steamboats, there are also 4,500 keel or flat boats, which, in fact, owe their existence mainly to the steamboats. They are built chiefly on the numerous small streams which flow into the great

rivers, and, in the spring and fall, are laden with the corn and pork raised in the vicinity. They are floated down to Natchez or New Orleans, where the produce is sold and the boat also. The men who navigated it return to their homes, in the upper country, by the first steamer that leaves the port.

It is estimated that each steamboat in the port averages twenty trips a year, and the annual cost of running the thirteen hundred boats, now in existence, exclusive of insurance, interest on cost, wear and tear, etc., is thirty-five millions of dollars.

It is not my intention to occupy your time, or weary your patience, with a repetition of statistics. The few which I have given are sufficient to show, in some degree at least, the magnificent results of this one great invention. These thirteen hundred steamers, which traverse the fifteen thousand miles of navigable western rivers and lakes, are so many living active intelligent agents of western enterprise and civilization. These agencies are, day by day, accumulating, and, like the population of the west, will double every ten years.

But it is not to the steamboat alone that western civilization owes its present prosperity. There are a thousand other agencies for which they are indebted to the genius and skill of the mechanic. The axe, the plough, the loom, are the products of our order. Indeed, every thing, from the delicate needle, in the soft fingers of a lady, to the anvil and hammer of the blacksmith, the world owes to the genius and labor of the mechanic.

It would be a pleasant, though laborious duty, to trace the connection which one article of manufacture, or one great discovery, bears to another, and thus to trace the progress of mankind, from the darkness of barbarism until

we entered into the noon-day of civilization; but I will not attempt it.

I have laid down, as the basis of my Address, the principle, that intercommunication, or commerce, is a necessary element in the improvement of our race, and to the perpetuity of the union of the American states, and that this element had its origin in, and belongs in a primary degree to, the mechanic arts.

Let us revert, briefly, to the early history of some of the western states, and we can trace, as with a sunbeam, the gradual advancement they have made in right directions.

Kentucky we will take as an example. She was settled about the time of the Revolution. It is a fact, that a party of immigrants from Virginia had reached a beautiful spot in the interior of Kentucky, when they heard the news of the battle having been fought on the 19th of April, 1775, for freedom and independence, in a small village in Massachusetts, and, in honor of the event, they gave to their new settlement, in the heart of "the dark and bloody ground," the honored name of **LEXINGTON**.

The early settlers of Kentucky were principally from the great Atlantic states of Virginia and the Carolinas. They were young sons of old and decayed families, who had become impoverished by keeping dogs, race-horses, and negroes, and in trying to keep up a certain style of living which their income could not sustain.

They were men of education and refinement, imbued with all the emotions and traits of character which gave such a chivalric and romantic interest to the old Virginia gentleman. For twenty years, the population, thus gathered in anarchy, was demoralized and essentially changed, by a fierce and bloody border warfare, full of atrocities on

both sides, so that the second generation of Kentuckians were a less civilized race than their fathers. During the revolutionary war, they were fighting with the Indians, and but seldom heard of what was doing on the seaboard. In the glory of that achievement, therefore, they had no share.

“Mountains, intervening, make enemies of nations,
Which had else, like kindred drops, been mingled into one.”

The remark of the poet was true, until the mechanic arts, by giving to nations steamboats, railroads, and telegraphs, levelled the mountains, and made the earth, as it were, one broad plain.

The people of Kentucky, at the close of the Revolution, had little attachment to the Union. True, they remembered the early homes of their ancestors, but dense forests and stupendous mountains separated them. They were courted by Spain, and France, and England, and were more than once upon the point of severing themselves from the Atlantic states.

The territory, now comprised within the state of Kentucky, belonged, until 1792, to Virginia. When Virginia held her convention, in 1787, to consider whether she would adopt or reject the federal constitution, Kentucky was represented, in the convention, by fourteen delegates, eleven of whom voted against it, after having heard the question debated, with an eloquence never before surpassed, by Madison, Peyton, Randolph, and Patrick Henry.

Marshall, in his History of Kentucky, says, that, in the July previous to the meeting of the convention, Harry Bemis, attorney general, wrote to the governor of Virginia as follows :—“I am decidedly of opinion, that this western country will, in a few years, act for itself, and erect an independent government.” In 1798, John Breckenridge

introduced the celebrated resolutions, which, in a milder form, passed the Virginia legislature, to the effect, that, if Congress attempted to enforce any laws which the states objected to, "it is then the right and duty of those states to nullify those acts, and protect their citizens from their operation." This doctrine received the unanimous vote of the senate, the approval of the governor, and of all but three members in the house. This was nullification in its broadest sense. Nor was Kentucky alone in the expression of such doctrines. Ohio, as late as 1820, passed resolutions, asserting and approving the Kentucky resolution of 1798, because a law of her legislature, for taxing the United States Branch Bank, in that state, to the amount of fifty thousand dollars, had been declared void.

I need not refer to the celebrated whiskey rebellion in 1790-1, the chief seat of which was at Pittsburgh in western Pennsylvania. Had the same means of intercommunication been available in those days that now exist, the rebellion would never have been thought of; but it grew out of this want. During the administration of General Washington, and chiefly at the suggestion of Colonel Hamilton, a small duty was ordered to be levied upon whiskey. An intelligent writer, speaking of this interesting incident in our early history as a nation, says:—

"The farmers of western Pennsylvania and Virginia could not send their grain down the Mississippi, and neither railroad, canal, nor turnpike, offered any easy conveyance over the mountains. The rye was, therefore, condensed into whiskey. A horse could carry but four bushels of the grain, while he could bear the whiskey, distilled, from twenty-four bushels."

"It was natural, therefore, in those days, when alcohol was regarded as a necessary of life, that the frontier men

should deem themselves aggrieved, and the tax unequally inflicted. The consequence was, a threefold rebellion : in the first place, the leading men of the suffering region,—the now venerable Albert Gallatin among them,—protested, and in no measured terms, against the system of the secretary ; in the second place, the thoughtless and reckless proceeded to tar-and-feather the collectors of the tax, and to commit other acts of violence ; while, in the third place, a systematic opposition to the general government was organized, and measures were taken to produce a universal rising of the people." This serious difficulty was not settled without bloodshed. Commissioners were appointed to adjust matters, but, when they went to the west, the people refused to listen to them, and their overtures were voted down in primary assemblies. They threatened to burn Pittsburgh ; and it was not until the march of troops put to flight the leaders that the rebellion was crushed. It was a much more dangerous rebellion than the one attempted in this state by Shays. One thing also is remarkable, that the instances of rebellion, or insubordination, in the states and territories west of the mountains, were exhibited in resistance to the laws or demands of the general government, and not to their own local laws.

From this brief review of some of the facts connected with the political history of the west, we see how lightly the people valued the stability and integrity of the American union ; that from their insular position, the total absence of all means of communication with the world on the seaboard, they were fast becoming estranged from us. They could see no advantage in being united with a people from whom they were divided by mountains almost impassable, and with whom they had few ties of interest in

common. They possessed a land rich in minerals, in climate, and in its vegetable productions, surpassing, in a thousand-fold, the land of promise which God gave to his chosen people. They had subdued it from an enemy more powerful and warlike than the Philistines of Canaan. The sun, in his daily circuit, shines upon no land so rich and beautiful as theirs; and yet, from the mere want of commercial facilities, they were fast verging into barbarism; the plough and anvil were fast giving way to the rifle and bowie-knife, and the descendants of the old Virginia and Carolina planters were fast becoming the mere "hunters of Kentucky."

Edmund Burke, in his splendid apostrophe to the beautiful and unfortunate queen of France, declared, that the "age of chivalry was gone; that of sophisters, economists, and calculators had succeeded, and the glory of Europe was extinguished forever."

Gifted with a knowledge of mankind superior to that possessed by any other statesman of his age, this great man, had he lived in our day and country, would have seen, in the progress and development of the mechanic arts, the dawn and the midday splendor of a new era more glorious than the age of chivalry, by the extinguishment of which he declared that the glory of European civilization had forever passed away. He would have seen, in the results of intelligent labor, in the achievements of the steamboat, the railroad, the magnetic telegraph, and the thousand other mechanical and scientific inventions, the real living practical agencies of wise conservatism, and of generous "loyalty to law." He would have found them to be "the cheap defence of nations, the nurses of manly sentiment, and of heroic enterprise;" that, while they created individual wealth, and swelled the aggregate of na-

tional greatness, they were the surest guaranties of the peace and prosperity of the world.

The age of chivalry was a brutal age. In it, the physical, and not the moral, qualities of man gave success. Even Christianity itself was forced by fire and blood, and life and property had no security against the rapacity of tyrant rulers, who "suckled armies" that they might "drynurse the land."

We may exclaim, in imitation of Burke, the age of Kentucky hunters is gone; yet, with us, it will not be an exclamation of sorrow or of regret. We rejoice at the loss. Kentucky is now one of the most loyal states in the American union. Her people are our people. The dark and bloody ground is now on its high career of prosperity. Upon her fair face, there remains but one plague-spot—slavery—which, however, is doomed inevitably to pass away before the advancing march of free and intelligent labor.*

Look at Ohio and Indiana. See how they have risen to power and consequence by the force of free labor. Their example is not hid from the sight of their elder sister, Kentucky. It rises before her eyes daily, with brilliancy and power like the sun in the heavens.

The genius of emancipation has no surer agency in her train, to give success to her noble purpose, than that of the mechanic arts. They cannot properly exist amid an ignorant slave population, or rather the two cannot exist together. This fact I shall very briefly prove. The great practical question, therefore, in most of the slaveholding states, is, whether they will clasp to their hearts an insti-

* At the election in August last, the people of Kentucky, by a large majority, voted to call a convention to amend the state constitution, one object of which is to pave the way for the abolition of slavery.

tution which is drawing from them their life-blood, or whether they will cast it from them forever, and substitute, in place thereof, another, which will clothe the whole land with joy and gladness.

There is no better criterion by which to judge of the progress which each state has made in the mechanic arts, than is to be found in the records of the Patent Office.

The whole number of patents granted in the United States, from 1790 to 1847, a period of fifty-seven years, is 16,094, of which number, 13,701 were taken out by persons living in the free states, and 2,393 were taken out by persons living in the fifteen southern states. Of the 16,094 patents granted, only one was taken out by a colored person.

It is interesting to examine into the character of the patents granted. They are divided into twenty-two classes. Those which relate to agriculture chiefly belong to citizens living in agricultural states. Massachusetts has but 92 of this class, while New York has 498; Pennsylvania, 267; Maryland, 105; Virginia, 122; Ohio, 127. Of the class which relate to manufactures, Massachusetts exceeds every other state in the Union. Of this class, Massachusetts has 393; New York, 366; Pennsylvania, 169; Maryland, 48; Virginia, 30; Ohio, 38; Rhode Island, 90. Rhode Island and Massachusetts are the two great manufacturing states, and, consequently, we find them excelling all other states in the number and value of new inventions in this department of mechanics. Massachusetts, with but one third of the population of New York, enters more applications, and receives more patent rights, than she does in this department of invention; and Rhode Island has nearly as many as the states of Maryland, Virginia, and Ohio.

How can the fact, that one invention leads to another,

be more plainly demonstrated, than by these statements? Do they not speak loudly in favor of the establishment of an institution, as a repository for new and curious invention, in our own city, like that of which I have already spoken?

Again, these Patent Office statistics speak, "trumpet-tongued," of the superiority of free, intelligent labor, over involuntary and ignorant labor. The number of patents granted to citizens of Massachusetts is 2,574, *which is one hundred and eighty-four more* than have been granted to citizens living in the whole of the fifteen slave states of this Union.

But I am admonished, by the flight of time, that my remarks must be drawn to a close.

I have endeavored, in what I have said, to draw the attention of this association to the illimitable field which our country opens to the profitable employment of the mechanic arts. I have endeavored to show some of the magnificent results which scientific mechanism has already achieved in this glorious land of ours, and to lead the mind to contemplate the future.

With union, with harmony, with peace, who can estimate the degree of prosperity and greatness this nation is destined to see! We should cultivate, at all times, and forever, a love of the Union. That is the great fundamental principle upon which our success depends. We should cherish harmony, and, with it, will grow those kinder graces of the heart, and the affections, which give a zest to life. We should encourage peace, for its own sake. In that one word lie the best hopes of the world.

GENTLEMEN OF THE MASSACHUSETTS CHARITABLE MECHANICS ASSOCIATION:

In conclusion, allow me to remind you of the object for which our association was originally formed, and which has always been to it what the north star is to the sailor,

CHARITY, that virtue which stands at the apex of the Christian column. Let it never be lost sight of. The designs of God are inscrutable, and "his ways past finding out." He has said, that the "poor we have with us alway;" were it not so, benevolence and charity would have no object on whom to exercise their humanizing power. For charity twice blesses: it blesses those who give and those who receive.

In the spirit in which our fathers founded this association, let it continue, while it exists. Let it share its bounties with the poor and unfortunate, so that, when the end cometh, we may be found, in the last great day,

"No wanderer lost,
A family in heaven."

NOTE.—The author acknowledges, with many thanks, the kindness of NATHAN CAPEN, Esq., in furnishing him with the statistics of the Patent Office, which he has made use of in his Address.

ORDER OF SERVICES
FOR THE
FOURTEENTH TRIENNIAL FESTIVAL
OF THE
Massachusetts Charitable Mechanic Association,
AT THE
SECOND CHURCH, OCTOBER 5, 1848.

I.
VOLUNTARY ON THE ORGAN.
BY MR. THORUP.

II.
ANTHEM.
God is in his temple,—
Let the people serve him—
Serve him with gladness.

III.
PRAYER.
BY REV. DR. HIGGINS.

IV.
LESSONS FROM SCRIPTURE.
BY REV. MR. RANDALL.

V.
ORIGINAL ODE.
BY EPES SARGENT, ESQ.
God bless our native land!
Prosper the toiling band
Of every clime!
Bid all good efforts speed,
Whether by word or deed,
Till all mankind are freed,
From want and crime!

Oh ! if to earth is given
 One certain type of heaven,
 One sacred fire,—
 'Tis when the kindling sign
 Of Charity divine
 Glows on the true heart's shrine,—
 Glows to inspire !

Then, Lord, our fathers' Lord
 Thy gracious smile accord,
 Thy spirit send !
 Quicken our faltering zeal,
 May we, in wo or weal,
 For others' suffering feel,—
 Feel, and befriend !

We of ourselves are weak,
 But in thy love we seek
 Wisdom and might :
 All that is good in Art
 Thou and thy works impart ;
 Grateful be every heart !
 God speed the Right !

VI.

ADDRESS.

BY COL. WILLIAM SCHOULER.

VII.

ANTHEM.

Swell the full chorus to Charity's praise,
 Proclaim it with joy ; as the theme of our praise.

VIII.

BENEDICTION.



MR. BUCKINGHAM'S ADDRESS

BEFORE THE

Massachusetts Charitable Mechanic Association,

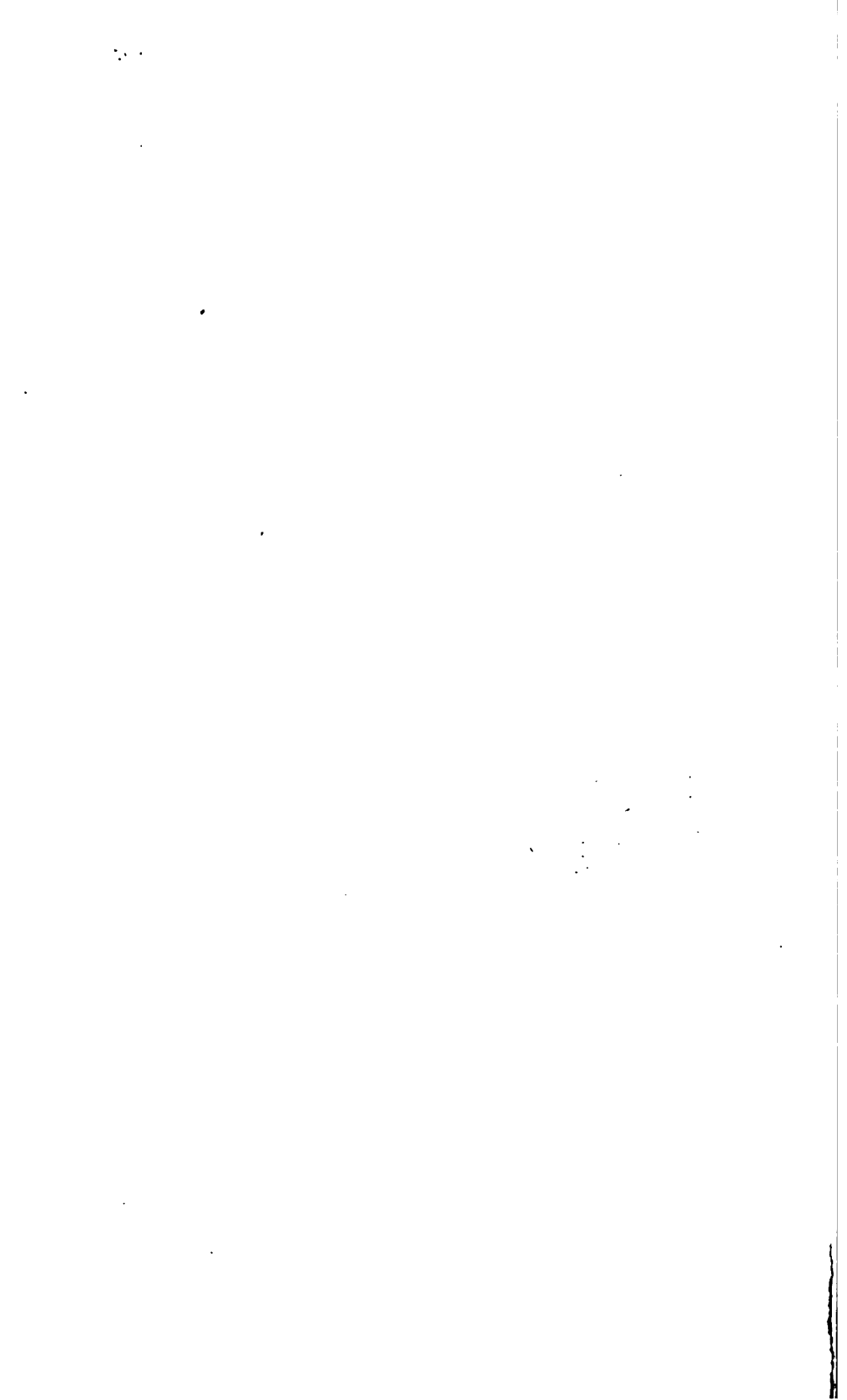
ON THE OCCASION OF THEIR

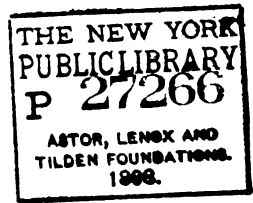
FIFTEENTH TRIENNIAL FESTIVAL,

OCTOBER 1, 1851.

☆ **MASS. HIST. SOC.**

11. 73. 9.





AN

A D D R E S S

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

ON THE OCCASION OF THEIR,

FIFTEENTH TRIENNIAL FESTIVAL,

OCTOBER 1, 1851.)

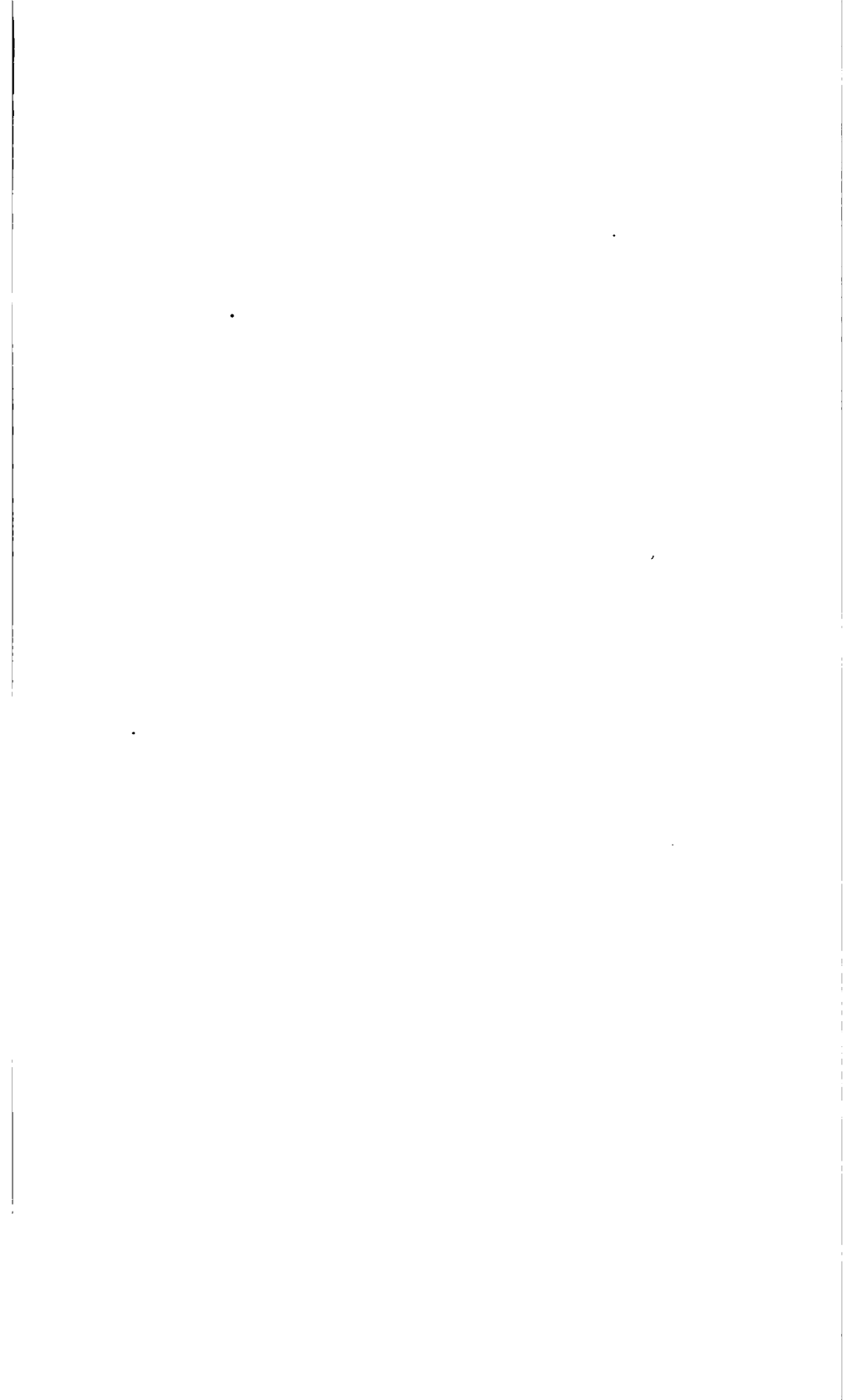
BY JOSEPH H. BUCKINGHAM,

A Member of the Association.

B O S T O N :

PRESS OF T. R. MARVIN, 42 CONGRESS STREET.

1851.



Boston, October 4, 1851.

DEAR SIR,

At a Quarterly Meeting of the Massachusetts Charitable Mechanic Association, held at the Masonic Temple, October 1, 1851, the undersigned were appointed a Committee to transmit to you the following vote :

"That the thanks of the Association be presented to JOSEPH H. BUCKINGHAM, Esq., for his able and interesting Address delivered on our Fifteenth Triennial Celebration, and to request a copy for the press."

Trusting that you will find it convenient to comply with this request of the Association, we remain,

Dear Sir, very respectfully,

Your obedient servants,

W. C. BOND.

OSMYN BREWSTER.

FRED. H. STIMPSON.

TO JOSEPH H. BUCKINGHAM, Esq.

Boston, Oct. 7, 1851.

GENTLEMEN,

I am much gratified by the vote of the Association, which you have communicated in your note of this day. In sending you a copy of my Address, allow me to express my most respectful acknowledgments to you and all the members of the Massachusetts Charitable Mechanic Association, for their kindness and consideration.

Yours, very respectfully,

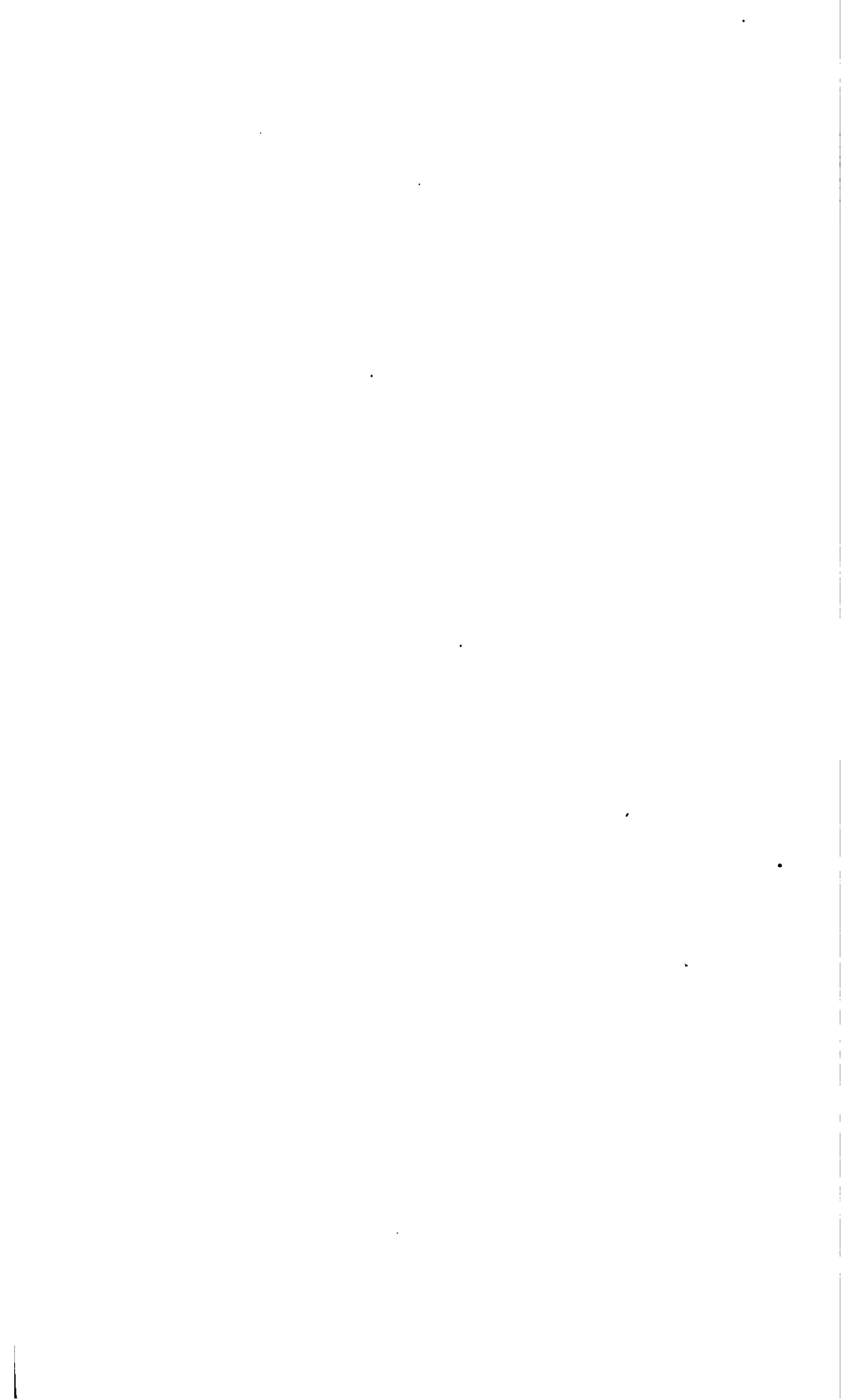
JOSEPH H. BUCKINGHAM.

Messrs. W. C. BOND,

OSMYN BREWSTER,

FRED. H. STIMPSON,

Committee M. C. M. A.



ADDRESS.

Mr. President,

and Gentlemen of this Association :

WE have come up here to-day, to lay our offerings of sympathy and affection upon an altar dedicated to Friendship and Charity; to acknowledge the blessings of Divine Providence; to remember the virtues of our Fathers; and to renew the promises we have made, to promote mutual good offices and fellowship by "assisting the necessitous, encouraging the ingenious, and in rewarding fidelity."

Of those who laid the corner stone of this our temple, there is but one left to us,—a gentleman now on the verge of ninety years of age, an example to his younger brethren, of good habits, a temperate life and unsullied character.

And it is good for us to meet thus once in three years. It was a wise provision that was incorporated into our Constitution, that we should observe this Festival, and wisely has it been adhered to. May it never be abandoned. It is good that we should have these special occasions appointed, that

we may take advantage of them to encourage us in the work we have undertaken. The period that intervenes is not too long for us to forget, nor yet short enough to allow us to be too familiar with, all the incidents that transpire between each, which are peculiar and particularly interesting to ourselves *as a class*. Our Association is composed of nearly seven hundred members; and there is no other, certainly no better mode by which they can all be brought together,—all at once,—as one great family. Our other meetings are mainly meetings for business; our triennial exhibitions have in view the promulgation to the public of our improvement in skill, and our advance in the arts.

But, on such a day as this, a day devoted to social intercourse, we become more personally acquainted, and the occasion is hailed with pleasure as the means of developing and assisting in permanently securing, the moral and benevolent character of our Association.

Since the last Festival we have been called to mourn the loss by death of twenty-four of our number, all of whom were useful and respected members, many far advanced in life, and several prominent in the positions they had held before the public. This would be a fitting occasion for an extended notice of those who have passed away, leaving only to their immediate connections the recollection of their usefulness in the daily walks of life; but materials for the compilation of such a memorial are seldom to be obtained without much labor and long investigation.

Of most of those to whom I now refer, it is to be regretted that nearly all that is known to the public, was contained in a few short newspaper notices, kindly and affectionately written, and, it is probable, forgotten almost as soon as read. Two on the list were known to me as men of untiring industry, with something similar in the character of their minds, who have, in their sphere, done much in the way of collecting statistics of the personal and public history of their own city. Without assuming to be scholars, they spent much time and much more labor than was ever repaid to them by any pecuniary success, in furnishing materials for those who come after them, to work up; and what they could not themselves secure, their enterprise pointed out to others the road to accomplish. Long and severe ill health marked the close of their days, embittered, perhaps, by the consciousness that those dependent upon them were to be left but poorly provided for.

Two others, brought up to the same trade, were more fortunate in health and in the possession of wealth; one having received, at various times, the highest honors in the gift of his State and City; the other being able to enjoy, in retirement in the country, the fruits of a well-spent life and the blessings of a large and happy family. The name of another is identified with the most useful improvements and inventions for the benefit of commerce; he was better known throughout the country for his system of light-houses, than he would have been as the author of learned dissertations and huge folios.

One other on the list, was but slightly known to me. I remember him, in my early youth, as a man of generous disposition, a prosperous and enterprising mechanic, having many hands in his employ, who were always well taught in their trade and well paid for their work. The world went well with him, and at one time he might have looked with confidence to an old age of competence, as the reward of faithfulness and integrity. But misfortunes came—not by any fault of his, but by the trusting nature of his disposition, and too great a reliance upon those whose rash speculation or wicked recklessness did not prevent their risking the property of others, when it was wanted for their own uses. Old age,—an honorable old age,—overtook him, it is true ; but it was an old age of toil and comparative poverty. Those who had been the occasion of his downfall had either gone before him, or lived in splendor, unmindful, if indeed they were aware of the fact, that they might do something now to repair the evils which they once assisted to create. Some men die, and their virtues are unsung ; while some, who are at least no more worthy, are followed to the grave by long processions, and their characters are eulogized from the pulpit by those who have realized the knowledge of the virtue there is in success.

If they were known to me, I should gladly avail myself of this opportunity to chronicle the events in the unpretending lives of all whose names are before me as having, within the last three years, been stricken by the hand of death from our roll.

Of many a man who has heretofore enjoyed the benefits of our Association, the only epitaph, so far as the world is concerned, was many years ago written by the poet :—

“The clouds and sunbeams, o’er his eye
That once their shades and glory threw,
Have left in yonder silent sky
No vestige where they flew.

“The annals of the human race,
Their ruins since the world began,
Of him afford no other trace
Than this,—THERE LIVED A MAN.”

Lessons upon the mutability of human affairs are to be drawn from every one’s experience ; and I may well say, in the words of an English writer, that “so many of those who but a few months ago constituted a portion of the *present* of my own time, are become so completely of the *past*, that I cannot look back without chronicling death after death, so as to force the considerations we too often try to put far from us, as to the uncertainty of life. We are all, indeed, ready to admit the uncertainty of this precious treasure ; yet we act as if it were, at least, as enduring as the sky above us, or the earth upon which we tread.”

The founders of our Association, having been active at an earlier day in the accomplishment of one good work, thought it their duty to combine and assume a position towards each other that should enhance their own usefulness and benefit their successors. How far we have followed their examples of industry and usefulness, how faithfully we have obeyed

their injunction to "be just and fear not," let each one of us ask his own conscience.

In other countries, circumstances which it is not necessary to trace out, have placed the Mechanic in a social and political condition very different from that which he enjoys in this. In almost all other parts of the world he has always stood, and to this day stands, at a lower grade in public estimation than he does in New England. The continually growing importance of the arts seems every where but here, to tend to the development of resources, and the accumulation of wealth *alone*, without raising the inventor or the workman, except in a comparatively few memorable instances, higher than to a subordinate rank. In America, thank Heaven, it is different. This is partly owing to our liberal and free institutions. But in looking at the true state of the case, we find that our free institutions were originally the work of the Mechanics themselves. Our Fathers came to this country poor. They labored with their hands; they toiled for themselves and their families; and not as the retainers of an aristocracy of wealth or power. In a new and unbroken land they carved out their own fortunes, and worked their way in honesty and industry to a position of honor, enabling them to bequeath to their successors a good name and a rich inheritance of morality and principle. They taught their children, as well as the savages around them, the arts of civilized life; and their children have, by the blessing of God, improved upon the lessons they

had set them to learn. The pupils have outstripped their masters in the race.

In time, from being a dependent and a subservient, our Fathers became a rebellious and an independent people. They built for themselves an aristocracy, not inheriting rank and wealth, but an aristocracy whose coat of arms are the symbols of hard labor, whose mottoes are the records of deeds performed in private and in public by the honest minded and strong thinking Mechanics. Their College of Heraldry contains no archives devoted to deeds of arms, no histories of the birth of Kings and Queens, no shameless stories of the union of usurping lords with shameless partners in intrigue and guilt.

The nights and days which preceded the birth of American Independence, were spent by Boston Mechanics in the low, dark rooms of the Green Dragon Tavern, where, taking counsel together, they fomented a Revolution which has shaken, in time, all the thrones of Europe, and has led to the formation of a government that now defies the world,—founded an order with neither stars nor garters for its emblems, nor requiring for its maintenance great wealth or illustrious descent, but with a charter of nobility having for its foundation industry, honor, benevolence and charity.

In those same dark rooms, after the work so well laid out by Boston Mechanics had been finished, and had proved acceptable to the people, Boston Mechanics again assembled, and laid the foundation of another structure. The architects of one pile

became the builders of another. Some of the same men, who worked at the commencement of the Revolution to establish a Government for a people, again applied their minds to the establishment of an Association that in its day has proved of incalculable service to themselves and their successors. The name of Paul Revere is to be found in the accounts of all the early meetings of the Mechanics of Boston in aid of the Revolution, and his name is inscribed on the record of the first meeting of this Association. The Green Dragon Tavern was the scene of the first act of rebellion to Great Britain, and it was the scene of the first meeting for the formation of a Society for mutual benefit and protection. The rebellion was the foundation of an Empire. The Massachusetts Charitable Mechanic Association will be the means, among others, of keeping that foundation sure ; its members will raise no rude hands to assist in pulling it down.

The object of the first meetings was not alone to obtain redress of present wrongs, it was to devise means for the protection of civil liberty throughout the land. The object of the second gatherings was for the protection of moral worth. The first compact was a charitable compact, for the benefit of the whole human race ; and that having proved successful, a second was formed with a view to the more immediate benefit of its individual members. The first was general ; but the second, although more partial, has proved, and will continue to prove, it is hoped, no less important and beneficial to the whole human family.

Other classes of society have claimed a higher rank than the Mechanics, and to some degree those claims have been allowed. Talent will always prove the means of exaltation. Wealth will always presume upon the influence it can exert over those who do not possess it. But talent belongs to no class, and wealth is not confined to any circle. The Mechanics of this country possess both talent and wealth; and although the Merchant, by an easier and more speedy road, acquires property which the scholar may inherit, the Mechanic, with his talent and his wealth, knows better how to use the position both can give him.

In looking back, in the history of this country, one cannot but be struck with the prominent part which has been filled on all occasions by the Mechanics. The Revolution having been successful, and the independence of the States secured, the first cry for help came from the Merchants. In those days there were, in fact, only two classes of society, for we had not then become an agricultural or a manufacturing people. Peace had its evils as well as war, in a country not yet well established in all its institutions; and the Americans, almost immediately after the din of war had ceased, were inundated with goods from abroad, which were sold at any price that could be obtained, to the injury of all the Mechanics. It was not long before the Merchants began to find that English vessels filled the ports and brought freights to the ruin of their own ships. The citizen soldier, released from duty in the camp, could find no work to do in the work-shop or in the

field. "British ships came freely and British goods came plentifully ; while to American ships and American products there was neither protection on the one side, nor the equivalent of reciprocal free trade on the other." The Merchants, ever prompt to act when their capital is endangered, and fruitful of expedient when they see all the money going out of the country, called upon the people to come to their assistance. A committee was raised which, after inventing several other schemes, but all to no purpose, called upon the people to refuse "to buy or use goods imported in British vessels." The Mechanics came forward in this emergency ; and in the Mechanics the Merchants found their best and most valuable friends, for they came promptly at the call, bringing with them willing hands and with words of sober truth and advice upon their lips. The Chairman of the Mechanics' Committee was again Paul Revere, the brass founder, a man who knew the true science of political economy better than many who have made it their study for a lifetime. In presenting his memorial he remarked to John Hancock, the Chairman of the Merchants' Committee, that the Mechanics agreed that such goods ought not to be purchased, but—he very significantly added—" *British goods ought not to be brought nor consumed at all.* If commerce was ruined by British ships, the Mechanics were ruined by the importation of British manufactures. What difference," said he, "does it make to us, whether hats, shoes, boots, handkerchiefs, tin-ware, brass-ware, cutlery, and every other article come in British

ships, or come in your ships ; since, in whatever ships they come they take away our means of living ?” This was the first promulgation of the doctrine and policy which led to the adoption of various plans for the protection of Domestic Industry in the United States.

Again, at a later day, the Mechanics were prominently useful as well as necessary to the country ; and Boston Mechanics were, as before, the main stay, the principal means of carrying out a measure of public policy. The adoption of the Constitution, it is well known, was not secured except by the action of Massachusetts ; and the Massachusetts Convention hesitated until impelled to action by the Boston Mechanics. History tells us that if Massachusetts had withheld her assent, many other States would have rejected it ; and also that it would not have been adopted by *this* State, if the Boston Mechanics had not sent to the Convention a strong committee, with convincing resolutions in its favor. When these gentlemen appeared, Mr. Adams, the President, asked—“ How many Mechanics were present when these resolutions were adopted ? ”

“ More, Sir,” was the reply, “ than the Green Dragon could hold.”

“ And where were the rest, Mr. Revere ? ”

“ In the streets, Sir.”

“ And how many were in the streets ? ”

“ More, Sir, than there are stars in the sky.”

This little incident, which has been told more fully and in better language than mine, was the turning point, and decided the fate of the Constitu-

tion. It was the aid of the Boston Mechanics that was relied upon, on all occasions. They planned, they advised, and they enforced measures the wisdom of which is acknowledged every where to the present day.

I have shown that the American Government and the first Constitution of these United States, were the work originally of the Mechanics. It has always been the fortune of the Mechanics to be the back-bone of the prosperity of the country. Standing armies are sometimes necessary for particular occasions, but there is a standing soldiery of moral power necessary in every nation as a reserve to be relied upon to secure permanency. That moral power in this country is the Mechanic interest, and the good work which the Mechanics began they have ever since been relied upon to finish.

One of the most noted incidents in the history of the present year, is that of the Great Exhibition in the Crystal Palace at London, and it will furnish to the world an assurance of two remarkable truths :— That our Mechanics are among the first in the world ; and that England's supremacy in all things no longer exists. However ardently we may have desired the one, and however reluctantly they may acknowledge the other, both facts are now indisputable. I am far from desiring to attribute unworthy motives to others, but I have looked upon this project of the English, from its first promulgation, as an effort to keep alive the old war upon all other countries, and especially upon America. The mind that conceived and the heads that carried out that project

were sagacious; and if they did not succeed entirely to their satisfaction, it was not for want of well-directed effort.

The boasted empire of the seas belonged to England; she once controlled the trade of the world; and she was once the manufacturer for all nations. But a change was felt to be coming over her prosperity. Her statesmen saw it. And it was necessary to stay the current that slowly but surely was running against her power. It is unnecessary to detail the struggles that have, from time to time been made, to force upon America her goods, nor the successful efforts Americans have made, by means of systems of internal improvement and tariffs for the protection of domestic industry—systems reluctantly adopted at last, after long opposition from the Merchants and much debate among the Politicians at Washington—systems only adopted in obedience to the moral weight of the representatives of the mechanic interest.

But I may be pardoned if I take up a few moments of your time in referring to well authenticated facts, to show what feelings and principles have always governed British statesmen. As long ago as 1699, a systematic course of restrictions on colonial manufactures was commenced, and Lord Chatham said in Parliament that “he would not have the Americans make even a hob-nail,” a sentiment that was echoed by many of his hearers, and to which another member of that body added, “nor a razor to shave their beards.” In 1816, the present Lord Brougham said that it was

well worth while, by a *glut*, to stifle in the cradle those rising manufactories in the United States which the then late war had forced into existence. Another British minister confessed, long ago, that the British policy was nothing more nor less than to get a *monopoly* of all markets, and to prevent other nations, one and all, from engaging in manufactures. And English writers on the subject of trade have always complained, because the surplus of their manufactures could not be forced upon the United States along with the surplus of their pauper population.

Here is the secret origin of the World's Fair at London. The world was to be invited, and the world was invited, to send specimens of the products of all nations to England for exhibition. Products of the earth and of the sea were not excluded, it is true ; but the products of the loom and the anvil, of the bench and the workshop, were what was particularly desired. The great glass museum was well filled with curiosities from all other points of the compass, the North and the East and the South, but not from the West. And when the large space that was so generously appropriated to the Americans was found to be almost tenantless, or at best occupied with only a few Yankee notions, a feeling of disappointment was exhibited by all parties. The end and aim of the scheme had not been attained ; and the Americans, instead of being seduced into the folly of showing to the British manufacturers on their own ground, samples of all the wares which are saleable in this

country, to be copied and sent back to us in a *glut*, are able, for a time at least, to keep possession of their own legitimate field of operations.

I am aware that I may be told that this is not so clearly the sole object had in view by the English, in establishing this great World's Fair ; and it is true that we have few or no secrets, as to the state of our trades, that cannot easily be obtained by other and less gigantic means. Curious and plodding agents, coming to this country, can see for themselves and make report to their masters at home. But to accomplish the whole object would require time and laborious research, in the hands of many and peculiarly and practically instructed men. Such has been the plan of operations heretofore, and it has not been successful ; for while one kind of manufacture was in the course of being ruined, another was springing into existence to take its place. Lord Brougham's *glut*, could in this way effect but one trade at a time ; but let all our manufacturers exhibit their wares at one time, on the very doors of their English rivals, and they would stand a very good chance of being ruined, at one single blow, by having similar goods forced, at all risk and at any cost, upon all the markets of the world to which we now have access, even our own. Our Mechanics and our Manufacturers would thus be crippled at once, and through their own folly.

The exhibitions by the different Mechanic Associations in this country are altogether of a different character, and are calculated to have a different effect. It is not necessary here to speak of those

of our own Society, for their benefits to our own people are too well known to be repeated. They encourage instead of ruining ourselves, and their tendency thus far has been to increase still more, from year to year, the power and influence of the Mechanics as a distinct class. Of our own exhibitions, the last was eminently the most successful and useful; the volume containing the reports of the different committees of judges is not only valuable as a history of new inventions, but as showing the progress of our Mechanics in intelligence and knowledge. Although we have been successful in competing with other nations, and have shown the world that the American Mechanics stand unrivalled for invention and improvement, for integrity and intelligence, they have many lessons yet to learn before they can claim the merit of supremacy.

The Mechanics of this country commenced the building of an empire destined to become larger than all the rest of the civilized world; and their work, so well begun, has been nobly carried out. But it cannot be denied that, up to the present time, in respect to matters belonging more immediately to our productions, we have done more for invention than for perfection. Our artisans have discovered, patented and published to the world many modes of saving labor, of increasing mechanical power, and reducing expense. But in many instances we have left our machines, although skillfully arranged and with principles well laid out, for others to complete. Other nations have been ready to take advantage of our remissness in this respect, and hence the great

superiority exhibited by the English in their steam engines for use on the sea, their often-times successful application of systems, the thought, the plan of which was the work of the brain of our own Mechanics. We are apt to be too much in a hurry to finish what we have begun, and we have put too many of our plans in operation before they were entirely completed. This is in part owing to the abandonment, in a great degree, of the old system of apprenticeship, and this is an evil that grows upon us every day. Time was, when no man was allowed to be a journeyman or a master, until he had served in all the branches of his trade from boyhood up, and was pronounced to be perfect in all. But in these days, the man or the boy, or the girl, who can set types, is a printer, even if he know nothing of the uses of the shooting stick, much less how to impose a form. The hard-fisted laborer calls himself a carpenter, because he is expert at driving a nail, knowing nothing how to handle a plane. He who can peg the largest quantity of soles in a day, claims to be a shoemaker, though he is but a cobbler at best, and cannot fashion a boot, or mend a rip.

But it is to be hoped that the progress of invention, and the distribution of the many kinds of work among various classes of workmen, will not eventually do away altogether with the practice of making proficient in all branches of all trades, so that we shall not be dependent upon the amateur salesman or purchaser, for opinions as to the true value of the articles submitted for inspection.

Gentlemen, you honored me with a call to address you on this occasion, an honor which I duly appreciate and regard. I have endeavored to show that the Mechanics have claims to be considered the first class in the community—that they are rightfully the lineal descendants of an aristocracy of a country whose bounds are now on two seas, on the east and the west, and which may be destined to be extended, perhaps within the period of the present generation, to the two other seas, on the north and the south.

Such being our claim to an inheritance boundless and unimpeachable, it becomes us to see that we maintain it in honor, that we live up to our pretensions. In order to do this, we must to ourselves be true. The legacy of virtue, benevolence and charity, that was bequeathed to us by the early Mechanics of Boston, and which we bound ourselves to preserve when each one signed this constitution, must be maintained without faltering or hesitation. I have entered into no statistics to show how much good we have done by our committees of relief, nor how much we have had to do with. The figures might tell a tale flattering to our pride; that is the business of the government, which is to be performed at the annual meetings. But the real charity that has been dispensed is, and always will be, unwritten. Charity does not consist in the regular contribution of certain sums of money, so much as in the words of comfort that reach only the ear of the recipient, and the tone of encouragement spoken in kindness to the young and the unfortunate.

Many of us have been called to pursuits not requiring any longer the constant use of the tools of trade ; but few, if any such, ever manifest a desire to resign their membership, and I know of none such who do not still consider it a privilege to be ranked as Mechanics.

I have detained you long enough ; the matters which come up on such an occasion are many and interesting ; they multiply before me as I proceed, and it would be but to tax your patience unnecessarily should I not now stop. But before I close, allow me one moment to express the hope that, as the Mechanics of Boston were the first to move in the acts which led to the establishment of our National Independence ; as the Mechanics of Boston were the means of securing to the confederated States a Constitution binding together all classes and all sects, at the North and the South, the East and the West, no future historian shall have cause to record that any Massachusetts Mechanic ever raised his voice or used his tongue to encourage the severance of a Union, which has for so many years shed the light of peace, and benevolence, and charity, upon a happy and prosperous people !

ORDER OF SERVICES

AT THE

FIFTEENTH TRIENNIAL FESTIVAL.

CHANT.

PRAYER, BY REV. DR. LYMAN BEECHER.

READING OF THE SCRIPTURES, BY REV. DR. YOUNG.

ORIGINAL HYMN, WRITTEN BY GEORGE COOLIDGE,
Member of the Association.

O God, Thy wondrous works and ways
Our spirits awe, our homage raise.
Thine everlasting laws we trace
In all things—tokens of Thy grace!
The elements Thy power provides;
Their fearful force Thy wisdom guides.

Thou settest free the whirling clouds,
And swift destruction man enshrouds;
Thou biddest ocean's surges roar,
And crumbling navies strew the shore;
Thou loosest subterranean fires,
And, whelmed in ruin, man expires.

Yet Thou the jewelled sky hast spread,
A curtain o'er his honored head;
Thou teachest him the deep to course,
Thou showest him the whirlwind's source;
Thy will appointest him the bound
That girds his habitation round.

Led by Thy hand, his steps explore
Thy vast creation's farthest shore;
Sustained by Thee, his feet descend
Where molten gold and sapphires blend;
And when with heavy woes oppressed,
His head is pillowed on Thy breast.

O God, in this, our festive hour,
We own Thy dread and sovereign power;
In mirth and gladness may we feel
Thou dost Thy gracious smile reveal;
And as we clasp our brother's hand,
Upright before Thee may we stand.

ADDRESS, BY JOSEPH H. BUCKINGHAM, Esq.

ANTHEM.

BENEDICTION.

Vol 7. of 2354, 25

AN

ADDRESS

9-
THE NEW YORK
PUBLIC LIBRARY
P 37051
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1899.

BEFORE THE

MASSACHUSETTS

CHARITABLE MECHANIC ASSOCIATION,

ON OCCASION OF THEIR

SEVENTH EXHIBITION

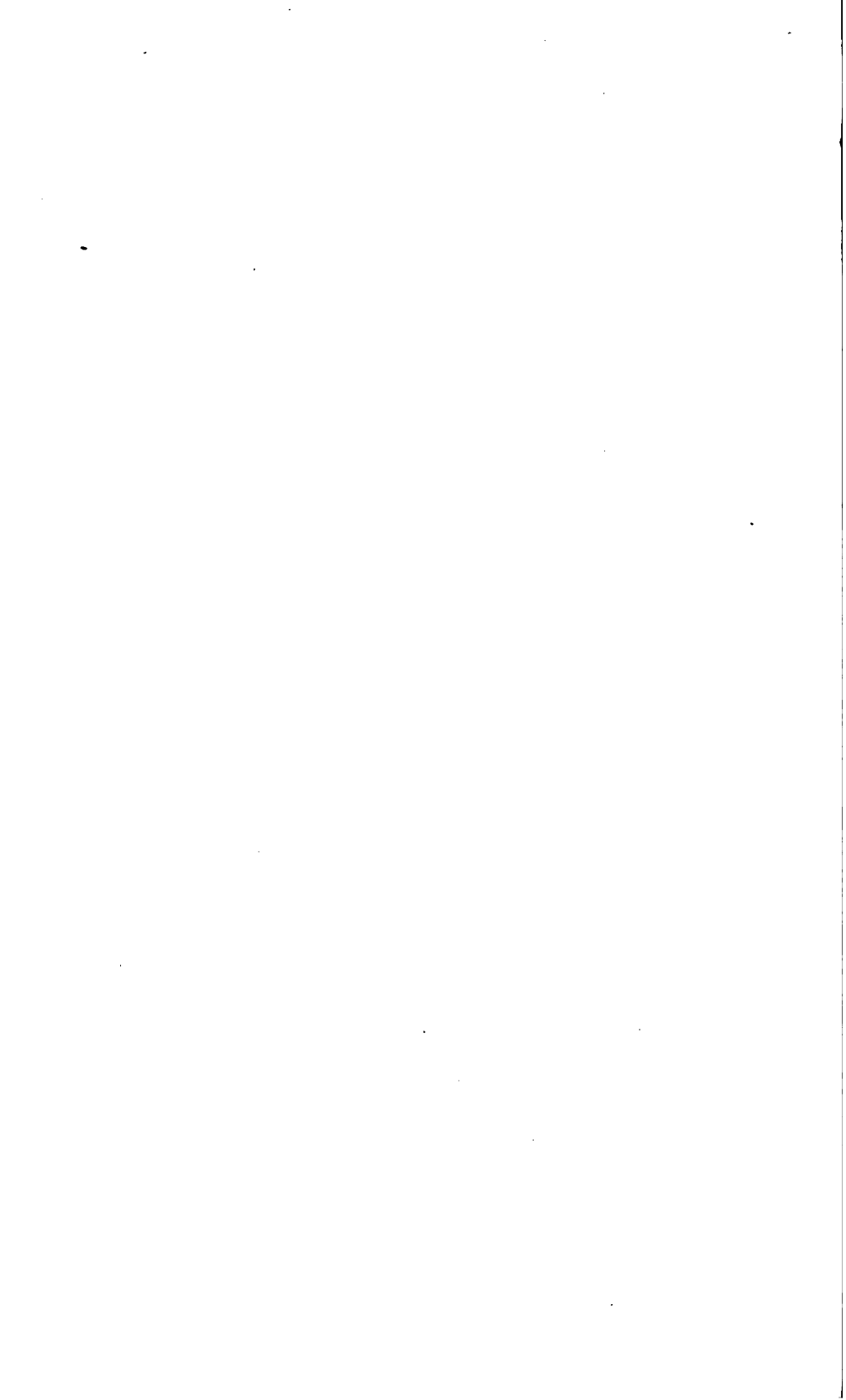
SEPTEMBER 27, 1853.

BY GEORGE R. RUSSELL.

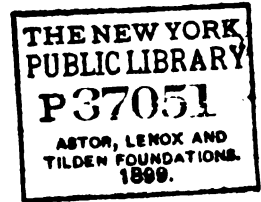
BOSTON:

PRESS OF DABELL & MOORE AND GEORGE COOLIDGE.

1853.



• AN



ADDRESS

BEFORE THE

MASSACHUSETTS

CHARITABLE MECHANIC ASSOCIATION,

ON OCCASION OF THEIR

SEVENTH EXHIBITION,

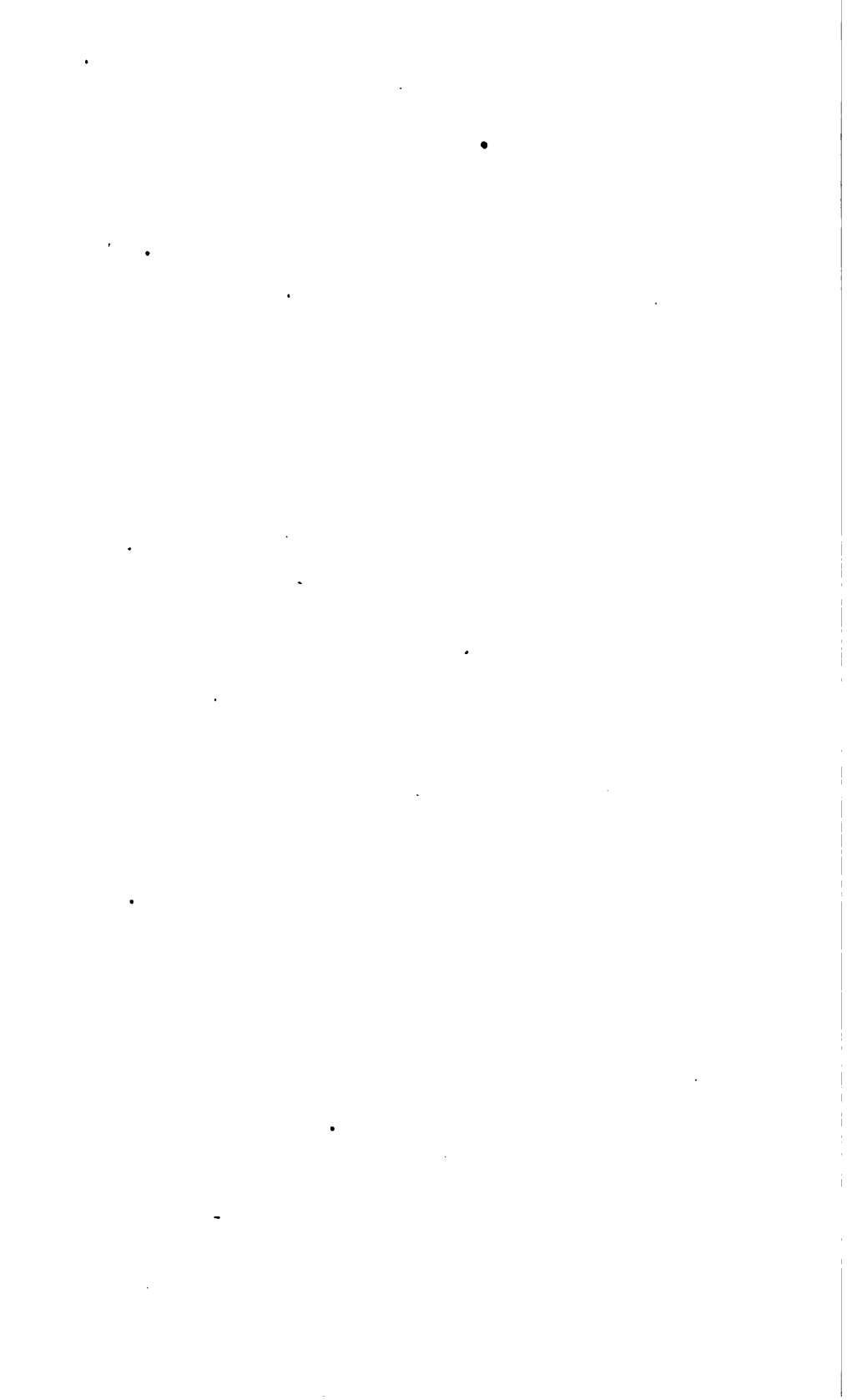
SEPTEMBER 27, 1853.

BY GEORGE R. RUSSELL.

BOSTON:

PRESS OF DANRELL & MOORE AND GEORGE COOLIDGE.

1853. R. A. H



MANAGERS' OFFICE,
SEVENTH EXHIBITION OF THE MASSACHUSETTS
CHARITABLE MECHANIC ASSOCIATION. }

To GEO. R. RUSSELL, Esq.

Dear Sir:—At a Meeting of the Managers, held this day, it was unanimously voted, "That the thanks of the Board be presented to you for the eloquent and interesting Address delivered last evening at the Tremont Temple, and that a copy be requested for publication."

The undersigned had the honor to be appointed a Committee to transmit the above vote to you; and would respectfully urge an early response to the wishes of their Associates.

Respectfully yours, &c.,

F. W. LINCOLN, JR. }
OSMYN BREWSTER, } Committee.
FRED. H. STIMPSON, }

Boston, Sept. 28th, 1853.

JAMAICA PLAIN, SEPT. 29TH, 1853.

MESSERS. F. W. LINCOLN, JR. }
OSMYN BREWSTER, } Committee.
F. H. STIMPSON, }

Dear Sirs:—I am highly gratified at your note containing a vote of the Managers of the Exhibition of the Massachusetts Charitable Mechanic Association.

As I consider the Address the property of the Society, I send it to you to be disposed of as you may think proper.

Yours, respectfully,

G. R. RUSSELL.



ADDRESS.

MORE than half a century ago, the organization was founded which now bears the name of "The Massachusetts Charitable Mechanic Association." Its early records give names which were known beyond the street and workshop; had taken conspicuous parts in that eventful drama, when rebellion had not yet grown into revolution, but was enacting those early scenes which called for an energy of character and devotedness of purpose suited to an emergency, in which submission would have been ignominy, and disastrous opposition, death. When treason became magnified, and, confronting power, marched in hostile array, with unfurled banners, not a band of conspirators, but an army of patriots; the same names were found by watch-fire and on battle field, sharing suffering and leading in danger. When, at last, the work was done, and a new-born empire, giddy with young existence, felt her frail life dependent on the forbearance of those who had produced it, these noble men, fresh from the excitements and license of the camp, returned once more to their old calling, and, resuming the honorable badge of labor, confirmed their devotion to their country, by merging the successful soldier in the peaceful, honest, and industrious citizen. These men understood the sources of true glory; and it is proper,

on this occasion, to acknowledge their worth, and to express our gratitude for their wisdom, their virtues, and their example. The Society they originated has grown with the land they defended, and its influence and charities have expanded with successive years. Its periodical displays of mechanical ingenuity and artistic skill, are not more wonderful than comprehensive. They are founded on a broad nationality, intending to embrace industrial art throughout the whole extent of our country. The invitations to contribute to these great festivals are not bounded by State lines, but go to the utmost limit of the Republic. This is not merely a Massachusetts, but an American Exhibition; offering room, inducement, and competition to all. If we show the results of our own invention and industry, we gladly welcome other efforts, trusting that a generous rivalry may confirm our own excellence, or teach us to remedy our imperfections. We are equally willing to benefit others by our own improvements, or to learn from them how to correct our failings, and to gather wisdom and experience from their better knowledge. A just emulation is an incentive to exertion, productive of good to the best interests of mankind; and it is well to bring together the various occupations of active life, that one may learn something from the other, and that all may feel the importance and the dignity of labor.

The Exhibition, which is now filling our streets with strange faces, and crowding our halls with eager multitudes, bewildered by the various and novel objects around them, has consequences far more important than the amusement of an hour, or the gratification of mere curiosity. It has a deeper object—a more extended and liberal purpose—affecting results which will endure long after it has passed away. This gathering together the products of the head and hand, showing the affinity be-

tween them, and their mutual dependence on each other; this prodigality of ingenuity scattered with a profusion which seems to defy examination; this mingling of everything useful with all that the most refined elegance can covet, satisfying ultra-utilitarianism and fastidious luxury; this assembling, in harmonious intercourse, competitors in every branch of art, and bringing contrasted occupations in contact, that all may feel the fraternal bond which unites them; this lesson, preached from every stand, and table, and corner; on floor, on platform, and through gallery; saying alike to every visitor, from every section of this Union — whether farmer or planter, merchant or mechanic, lawyer, doctor, or divine — Behold this monument of free enlightened labor, this union of mind and matter, the effect of manual skill directed and governed by intelligence. All these are offered with worthy pride, and will be usefully remembered when the present glory has departed, and this passing pageant shall be numbered with its predecessors.

The character of a nation is recorded in its Arts. The secrets of old civilization would be almost wholly unknown to us, were it not for the fragments, gathered at intervals, as time or exploration scantily unfolds the crumbling remnants of ancient art. On the monuments of centuries the deep indentations, as they defeat all effort to discover the mode by which they were inscribed in the eternal granite, give facts of little import and insignificant detail, yet the most that is known of their construction. For thousands of years the hot sun has burned on them; the whirling sands, shrouding them in forgetfulness, have crept upon them, and, entering curve and crevice, are gradually asserting the dominion of the desert, and obliterating even the little that remains to speak to us of the distant past.

For the foundation of all knowledge we must go back to Egypt. Other lands, to which we turn for models of all that is useful or beautiful in art, are but things of

yesterday when compared with that Mother of Nations. Her empire bore the weight of two thousand years when Cecrops led his followers to colonize Greece, and Abraham may have gazed at the pyramids when they were already worn by the attrition of fifteen centuries. Yet, still further back, in that shadowy realm where fact and fable are so entwined that ghostly tradition flits in dim outline, stands a more remote antiquity, scorning, with mocking finger, the chronology of modern times. There India and China look down on Egypt and claim from her a filial reverence. The time, doubtless, has been, that the arts flourished in those countries, when the banks of the Nile were not yet peopled, and temple and obelisk, colossus and pyramid, slumbered in the unworked quarry. But their stagnant civilization was passed by the fresh vigor of other lands, and remains, perhaps, to the present day, with little change from the period when they claim to have been governed by the gods.

The Egyptians classified society into priests, soldiers, husbandmen, tradesmen, and artificers, giving each their rank in the order they were named. They were the most priest-ridden people of antiquity, and one would think they might have given a higher grade to the class which carved out deities, erected temples and shrines and monuments, got up palaces for the living and mausoleums for the dead, and left behind them memorials, which alone would tell, to future generations, of the glory of the Pharaohs and Ptolemies. The poor fame for which they sighed*and planned, was dependent on the hard hand of labor; and the despised mechanic was the instrument by which priest and warrior were to secure their brief immortality.

The arts of Greece have been sung from Homer down. She never suffered her modesty to interfere with her celebrity, and whatever she borrowed, she invariably kept and claimed as her own. But what she touched, she purified,

and the baser metal of others became, in her hands, pure gold. She stole what she could from her progenitor, but the larceny did not interrupt her veneration. She made her the birth-place of the gods; and when the besiegers of Troy could not reach, with their prayers, the ears of Jupiter, it was because he was amusing himself with the Egyptians. Primitive Greece nurtured the useful arts. There was much of the Yankee in those old heroes of Homer. They could do something besides fighting. Agamemnon, "king of men," would have been ragged, had his own fingers not mended his clothes and tinkered his armor; and the most aristocratic of his followers must have gone hungry to bed, unless they cooked their own supper. Ulysses proved an excellent boat builder, when necessity called upon him, and, in the palmy days of his prosperity, he amused his leisure by making and ornamenting his own bedstead. It may be doubted whether this production of the wisest of the Greeks would have secured a diploma at the present exhibition, though his practical good sense would have deserved it. It is questionable, however, whether he inherited this quality, as it is stated that his father weeded his garden, and dressed his vineyard, with his gloves on. He was less particular in this respect, as hereditary succession secured him his principality; but had he been a candidate in our day, for political honors, his effeminacy would hardly have stood the test of caucus and the ballot-box.

The Romans preferred encouraging the arts among their neighbors to cultivating them themselves. They had a method of appropriating the labor of others, whenever it suited their convenience. Such a simple process saved much trouble, and obviated the necessity of book accounts. They belonged, decidedly, to the "Manifest Destiny" school, and carried their taste for annexation to an extent never since professed — until now. They wanted all the

land next to them, and every thing that belonged to any body else; and they helped themselves liberally, with a magnificent indifference to the rights of others. They no doubt talked in a very edifying manner, on the propriety and benevolence of extending the area of freedom, and considered it selfish to monopolize the blessings by which they were surrounded. The servile arts, which comprehended about every thing useful, were held in iron bondage; and not satisfied with scourging a careless, or crucifying a rebellious mechanic, within the territory they already possessed, they longed for a larger and more comprehensive liberty, with which they could expand the area of scourging and crucifixion. It may have been, that "Young Rome" smiled at the shaking head of "Old Hunkerism," and listened impatiently to its prophetic warnings; or turned with fierce denunciation on the "fanaticism" which dared to speak of the justice of Jove and the equality of men. There is a moral in the lives of nations, as of individuals, and if one would read the penalty of foreign conquest and domestic wrong, let him look at "Young Rome" now. In the chancery of Heaven divine equity may take, what seems to short-sighted man, a long time in giving a decision. But if slow, it is sure; and from it there is no appeal. Anne of Austria said to Cardinal Richelieu, "Sir Cardinal, God may not settle accounts every week, but he settles them at last."

For some centuries after the extinction of the Roman empire, the arts not only made no advance, but were neglected and forgotten. The world was covered with a funeral pall, as though a moral pestilence had swept over it and smitten down every manly virtue. During all that period of dull, dead monotony, when "darkness was upon the face of the deep," and the sea of life was overspread with a calm so motionless, that no redeeming vitality seemed left to stir its waters, hardly a solitary feeble light

appeared to cheer society and keep it from receding into its original elements. Unmeaning wars, which could not even float the poor bubble of military glory; feudal oppression, that crushed down every generous sentiment; and monastic superstition, which brooded with black wings over poor humbled humanity, fill up the pages of history which record the degradation of that long night of gloom.

At last, a cry burst upon the ears of sleeping men, and awakening them to life, poured Europe upon Palestine, and gave an impulse to enterprise long after the holy sepulchre was abandoned. Then came discoveries, consequent upon the renewed energies of mankind, and the human race started on a career which gave a new era to the world. The arts once more arose, and advancing with the general progress, lured back their missing sisters, or called on invention to supply their place. But, here and there, some lone one, like the lost Pleiad, seemed blotted from the heavens, and kindred constellations were, hereafter, to shine on, without a ray from those fallen stars. But, in their revival, the arts had their favorable or adverse periods, as sagacious liberality patronized, or thick-headed despotism oppressed; now prostrate for long courses of years, and then arising, with regenerated vigor, to give a renown to their age, and an epoch to history. Wars, the deadly foe of industry, have broken in upon them, in almost uninterrupted succession, diverting human activity from its legitimate occupations, demoralizing the taste, and weakening the inducements to honorable labor.

The mechanic makes a good soldier. The transition from the hammer to the musket is not unnatural, and sinews which have hardened in unremitting toil care little for the fatigues of the field. Men, accustomed to system and regularity, fall easily into the discipline and privations of military life. But to return to the paths of peace, is quite another and more difficult operation. Campaigns are not

schools of morality; and the teachings of the bivouac do not improve, although they are apt to supersede earlier impressions. Lessons learned by the watch-fire and in the smoke of battle, amidst the dead and dying, over the ashes of villages and the sack of cities, are sorry remembrances to bring back to the domestic fireside, or to walk with one when bells are knolling to church. The harmony of nature loses its charm on senses which have been accustomed to the drum-beat and the movement of battalions. It is dull work to go back to the shop, with the din of arms still vibrating on the ear, or to keep patiently to the allotted hours of labor when the imagination is dwelling on "hair-breadth scapes i' the imminent deadly breach." The Latin poet says, that the descent to the infernal regions is easy, but that it is rather troublesome to mount up again. It is an innocent, though not perhaps a profitable amusement, to play soldiers, and wears a certain dignity even when the musicians outnumber the rank and file, steel coming out second best in the competition with brass, as "the pomp and circumstance of war" move through admiring crowds, punctually at the hour of "high change." But woe to the country where this, instead of being an occasional recreation, becomes the main object of life, engrossing the thoughts and capabilities of its people, and making every occupation subservient to the "bravo's trade." Should the days ever come upon us, which may God in his mercy forbid, when the bustle of trade, and the uproar of the factory, and the clang of anvil and workbench, shall give place to the discordant notes which tell of preparation for deeds of blood, the true glory will have vanished: Night will be settling upon New England when a martial spirit shall forget our sources of power, and turn us from the calling of our fathers. Better seek distinction in the struggle where the brawny arm works out the suggestions of the head, and spreads comfort and luxury over all

the land ; better cover the sea with ships laden with the products of a superabundant industry ; better look on fields where the well-turned furrows tell that the plough, and not the cannon, has done its work. Monuments of mechanical invention are more glorious than the spoils of war ; the enterprise of commerce brings back the blessings of friends, instead of the curses of conquered foes ; waving corn is more beautiful than charging squadrons, and the golden harvest more useful than ground covered with dead men ; diplomas are not less honorable than epaulets, and premiums are certainly as substantial as brevets. The ardent patriot, who feels the necessity of periodically rekindling the martial flame of this people, need not be alarmed lest it should be smothered if left untouched. There is more danger in fanning than in heaping ashes upon it. The same energy which is now devoted to the arts of peace, would be terrible if concentrated in one hostile united purpose. The men are here, whose ancestors struck hard blows at Marston Moor and Naseby, scattering, with headlong onset, the chivalry of England, and building up a State with sword and bible. The stuff which led the fathers is in the sons, though better circumstances give it a different direction, and they know little of its character who trifle with it.

The mission of New England is not with "stricken fields" and "garments rolled in blood." She has higher and nobler duties, and her destiny is to build up and sustain, not to pull down and destroy. Her pride is in rearing her hardy children on the soil from which their iron will and iron hands wring not only competency but abundance ; in converting every stream into a mill course, and filling her valleys with the monuments of enterprise and industry ; in courting competition and giving public evidence of perfection in the mechanic arts ; in providing homes for the destitute and afflicted ; in maintaining

free schools, which with open doors call equally to all, and offer to the children of the poorest immigrant the means of becoming useful and honored citizens; in tolerating all creeds, and sowing broadcast on her hills, temples of every sect, all dedicated to the Prince of Peace. These are the glories of New England, on which her prosperity is founded, and which, while they endure, will perpetuate her fame forever.

The stranger who comes among us, whether from the Old World, or from those portions of our own, which, though our country, are almost as far removed, wonders at the magic which has, within the short space of one man's life, transformed the forest into populous abodes of refinement and intelligence. Our brother of more genial climes looks at the institutions sustained by voluntary labor, and returns to his own home with kindly feeling and dawning thoughts, from the example which may yet have an illustrious fulfilment. The foreign traveller finds a new creation as he looks on the results of education and well-directed enterprise, and the problem of self-government is solved amidst the evidences of an advanced civilization. The enlightened Briton, standing on the mighty shaft which commemorates a day memorable to humanity, as he views the well tilled-farms, verdant in the distance, and his retreating eye rests on the cheerful villages stretching around him, and then falling on the fair city at his feet, with its harbor white with departing or returning canvas, and hears murmuring up to him the pleasing hum of busy, peaceful men, sees, in the mass of granite which upholds him, not the record of one bloody morning,—a mere memorial that at its base brave men met death,—but a landmark in the pilgrimage of time, from which to date the existence of a happy people. He feels that he gazes on the handicraft of his own kindred blood, and, reverting to the eventful conflict, he reverently thanks God for that day's work.

We live in a country where it is very uncomfortable to do nothing. Loafing is at a discount, and is the most wearisome of occupations. Carlyle says that "ease is for no man," and if ease means idleness, he must have been thinking of us. In the cities of Europe there is a class which passes through life without doing anything useful. Time has sanctioned the profession, and it consists of sufficient numbers to keep one another in countenance. But here the attempt is a desperate one, and of such exceedingly doubtful estimation that the most inveterate loungeur feels it necessary to incur the expense of a gilt sign, to indicate that he has a place of business. It is in vain that he goes round, seeking for sympathy. He feels that he is in everybody's way, and is like the truant boy in the story, who invited every animal he met to play with him, but as all were too busy to attend to him, he finally concluded that he had better go to school.

With us, men generally die with their harness on, and leave off work only when they leave off life. Many a man, who has earned an honorable discharge, and should have the freedom of those hospitable asylums which insure against fire, water, and ennui, and keep open doors where worn-out veterans can "fight their battles o'er again," yet disdains the side scenes, and will not quit the stage till the curtain falls. Most men when entering on the active pursuits of life, look forward to the time when they shall cease to labor, and retreating to some fairy spot, where the world dies away and paradise begins, may

"Husband out life's taper at the close,
And keep the flame from wasting by repose."

But the time for such retirement recedes with advancing years; habit reconciles the mill horse to his eternal round, and it may not be safe to change either the spot or the pace. It is hard to leave the old accustomed place of hopes and fears, successes and reverses, exultation and

depression ; to give up the excitement and importance of business life, and settle down a forgotten nobody, never again destined to come before the public until a line or two appears in the obituary notices, under the head of "another old citizen gone." To one of limited tastes and few resources beyond an accustomed track, it is a wise conclusion to travel on the old road, unto the last stopping place. There is often injustice in attributing this course to an exorbitant love for accumulation. There is, to be sure, a class on which such a supposition is not wasted, and which does toil on with no other motive than to add something more to wealth, of which it neither understands the use nor value. There are hard, exacting men, whose only utility in the world is in creating a disgust which deters others from following their example ; men who have but one standard of judgment, and who classify their fellow creatures according to the value of their notes and their credit at Bank ; who acknowledge no worth but the worth of dollars, and put a value on property and its possessor which entitles the latter to an adoration not inferior to that once paid to the golden calf. These harpies of society, who fatten on the misfortunes and necessities of others, biding their time and hoarding up their power, to be carefully doled out at the highest rate, look impatiently for that periodical visitation, a "stringent money market," and when the panic-stirring guest, like Medusa's head, has turned Bank Directors into stones, they smell "the battle afar off," and in these times of trouble, prowl about the streets, like Shylocks, with knife and scales, seeking their pounds of flesh. A man of this class looks on the making of money as the chief end of life. His thoughts, and conversation, and dreams, are eternally on money, and he likes it so well, that he not only gets all he can, but keeps all he gets, and leaves others to pay what he owes to the community, which protects him, and his ill-

got gains. He improves upon scriptural injunction, and does his charities so stealthily, that not only does his left hand not know what his right doeth, but both are equally ignorant of the fact. He lives as though his investments could be transferred to the credit of his account in another world, if the thought ever occurs to him that death can cross his threshold and have the presumption to step between him and his balance sheet, interfering with all calculations of interest, when so many pauper establishments are courting his appropriate attention; and yet, the grisly leveller stands by his bedside, and ushers him into possession of a very small piece of real estate, to which the only valuable article of personal property he takes with him, is the plate on his coffin lid.

There is an expression of common currency which computes the value of a man by a scale graduated to his supposed possessions; and there are those who make it their calling to find out his exact estimate, by the unvarying inquiry of "what is he worth?" It is curious to consider worth and dollars equivalent terms, and it seems an abuse of language to make that application, when there are so many who possess much gold and silver, but are not worth one copper cent. There is a strange element which is strongly developed in the reverence for wealth; and yet it is a most unprofitable adoration, for cringing has no money value. Bowing and fawning will not wheedle one dollar out of a rich man's pocket. He knows full well the cause of his superiority, and will not part with any portion of that to which he solely owes his distinction. A division of property would create an equality that would be ruinous to his supremacy. The almost universal desire for accumulation is wisely implanted in our race to urge us to exertion, that we may not desist from labor while there is duty before us, but may be stimulated to continue on the field of action when no longer goaded by the spur of

necessity. There is honor in the acquisition and possession of money fairly won and judiciously expended ; and when we look around us and see what has been done among us by the union of opulence and benevolence, we have reason to speak with gratitude and respect of the generous men who, having built up a name and fortune, have left behind them lasting memorials that "the good *was not* interred with their bones." But it is one thing to amass for the sake of liberality and humanity, and quite another to grind, and haggle, and shave, to feed inordinate avarice or to gratify a foolish ostentation, which manifests vanity without taste, and extravagance without elegance, proving that there may be a vulgarity in riches which cannot be concealed by all their agencies and appliances. Overgrown fortunes, with us, while they are evidences both of public prosperity and individual sagacity, are of very temporary influence, whether for good or evil. Where entailed estates are happily unknown, the divisions and subdivisions of an inheritance, however large, soon reduce it to inconsiderable fractions ; and at the end of a generation or two, the descendants of the rich man must work for their daily bread. Other names arise to go through the same unvaried process, live their little hour, and be swept away to be known no more. Such is the unfailing doom of wealth ; and as time bears up new names and consigns the old ones to oblivion, there is, doubtless, many a righteous retribution inscribed on his revolving circle.

The necessity of occupation, so generally felt among us, produces a restless and earnest activity, which keeps us all in motion, and the character is fully sustained the wide world through. We flit from city to city, from continent to continent, now steaming up rivers, by the thousand miles, and now traversing oceans. We nod to our neighbors in the Parks of London, on the Boulevards of Paris, in St. Peters at Rome, on the summit of the Pyramids, or

by the cataracts of the Nile, with as much indifference as in our daily rounds at home. We will go anywhere if we can only go quickly. We delight in railroads and steamboats, those modern contrivances, as some one has styled them, for the annihilation of time, space, and passengers. We rather like collisions and blowing up, as we are used to them, and they are indications of laudable rapidity. We complain a little when we lose our friends, and we make laws for better security, which are about as significant and effective as the resolutions of a political convention. It will never do to work for a reform in earnest, for, by so doing, we might diminish the rate of travel, causing a fearful loss of time, and disturbing the economy of the universe by arriving a few minutes later. Better find fault with steam companies and railroad directors, though we shall always continue to patronize the fastest boat and the swiftest train.

Our movable qualities are extended to inanimate matter, and the spirit that keeps the human hive in agitation, has inoculated the fixtures of parlor and bedchamber, which served our great-grandams with staid and decorous sobriety, but are now following a youth of gravity with an old age of friskiness. Even the respected relics which came over with our ancestors, in such marvellous quantities that wonder arises how those busy, self-denying men and women could have required such an incredible number of chairs, behave with shameless levity, performing antics they certainly never practised before the Pilgrim Fathers. We dwell in times of raving distracted furniture, and it is not surprising we cannot keep still ourselves, when seats move from under us, and tables, finding the use of their legs, walk off with the independence of a newly landed voter. We may cease to be astonished at anything. Since our childhood, wonders have thronged in upon us in such overflowing abundance that we can look

with serene and unmoved composure on things which would have hanged or burned our forefathers. We do not, now, turn to the scaffold or the stake to relieve us of what we do not understand, but we apply to acknowledged laws, to the philosophy of matter, to the science that is not startled at novelty, but sets about to resolve and determine it. What was once dark and mysterious has become enrolled among known principles, sharing and assisting in the economy of life, and what, today, awes by seemingly supernatural agency, may yet take its place, not among psychological, but physical phenomena. The flames of the Inquisition would have curled about Galileo, had he not recanted his awful heresy, and our own excellent progenitors might have manifested a joyful alacrity in the application of scourge and halter to the sorcery that should have predicted a hundredth part of the marvels which are familiarized to us by every-day experience. The world's history is full of persecution of great men, who stepped forward in advance of their age, warning us to look kindly on honest purposes, and to judge with charity what we do not comprehend. Let us not ridicule or despise new things, because they conflict with our observation or seem to be impracticable. There is hardly a discovery or invention in art that has not had its days of trial and discouragement. Many a man has gone heart-broken to his grave, in whom the fire of genius has burned, unseen and unappreciated, when adverse circumstances, or shrinking timidity, or cold neglect, or the want of one kind word, have come like a mountain upon him and kept his secret buried forever. Prison bars have been pressed by throbbing brows which would have redeemed the world. The walls of Insane Asylums have been covered with fantastic characters, unmeaning to the passing visitor, and yet, within their cabalistic circle there has shone brightly forth to the crazed eye of poor shattered

men, some wondrous truth which the wide world would not acknowledge, and deriding incredulity has brought them to the madman's cell. A stupid Pontiff kept Michael Angelo quarrying out marble, when every hour of the life of that great man, almost too great to be mentioned even among great men, was of more importance to humanity than the whole lives of all the dignitaries of Church and State that ever wore tiara or purple. The records of the world are full of the neglect of merit, and yet nothing has been told. Perhaps there is scarcely a man living who has not, during some portion of his life, known some one who pined unheeded, wanting the genial air and sunshine which never came. Men get misplaced, and do not meet the magnet to draw out the metal within them. Mediocrity writes verses when it should be holding the plough, and the true poet does the drudgery of life, not dreaming why the fire within torments him. The flint and steel are cold and cheerless until struck together, and they may never come in contact. Opportunity does much for all men. The merest trifle turns the whole current of one's life, and leads in a direction it never thought of running. How few can look back on it, when it is verging on decline, without wonder at its course. The plans and promises of youth have been utterly confounded. Poetry has changed to the very plainest prose, and romance has become so matter-of-fact that the dream-land has vanished away in company with the pap-spoon and porringer. A rising generation shoves us unceremoniously aside, as being too old for the times, and leaves us with the farthingales and straight-cut waistcoats of our ancestors. We may have flattered ourselves that we were tripping lightly along in the march of improvement, as far-seeing as the wisest, and as nimble as the youngest, but a voice behind "complains that we are slow," and bids us clear the track and make way for our betters. There are retributions in

all stages of life. What we thought of the generation just past, the advancing one thinks of us; and this will, in turn, have the conceit knocked out of it by its successor. Human energy, like human love, is on an ascending series. It does not look back, but reserves itself for the future. The parent mourns over the seeming indifference or ingratitude of the child, and wonders that anxiety and deep yearning affection are not requited in kind and with the same disinterested devotion. If the outlay rarely returns, it is not squandered, but is hoarded up to be lavishly paid, with interest, to the children's children. We must rest satisfied with this prospective remuneration, and not grudge an expenditure which, if never refunded to us, rejoices our descendants. If we imagine that we know something more than our immediate ancestors we willingly give up to our immediate progeny. It is a matter of astonishment what an extraordinary quantity of superhuman babies are born daily, though a writer has rather irreverently remarked — that, considering the universality of wonderful children, it is rather surprising the world should contain so many ordinary men and women. Indeed, there must be many divisions of this Union to provide for an infinitesimal fraction of those who are destined to the Presidential mansion, and a prodigious increase of States to give chairs to the smallest possible portion of embryo Governors.

The great discoveries which affect human destiny, may sometimes break through cloud and storm, dazzling the eyes of men; but they oftener come slowly on the uncertain vision, and the serene heavens are not disturbed by the gradually dawning light. Accident occasionally brings forth some new secret of nature, or by casual combination produces effects which are in themselves important, or suggestive of something hitherto unthought of. Men plodding for one thing, find another, and are astonished at

their own fame. Some till the earth and turn up gold, whilst others seek only the gold, and our frugal mother sends them back with empty hands. A search for the East Indies resulted in the discovery of America. The alchemist in his midnight watch for that mighty revelation which would indefinitely prolong his existence, for the enjoyment of boundless wealth, drew out, from alembic and crucible, the elements of that science whose practical application has become auxiliary to some of the most valuable branches of art.

But the tide of human progress is not controlled by chance. It bears on its flood abundant testimonials, that intelligence and thought and system have swayed its movement. The great improvements, which have signalized the age in which we live, have mostly originated in deep thinking, earnest men, and been carried to perfection by patient and laborious reflection. Success, in any description of art, can only be obtained by a concentration of mental power, directed with unwavering purpose to its object. The close application of a life can scarcely master the rudiments of some pursuits, and in none can excellence be reached without determined will and undivided attention. There is an activity in man which must find something on which to expend itself, and it has been reserved for our day and generation to see the energies of mind and body brought in joint relation, and devoted with united strength to the arts of peace.

The distinction of Fine and Mechanic Arts, is in a great measure done away. There was once a broad line between them, and one disdained an alliance with the other. It was supposed that genius could not descend from her etherealized habitation and mingle with her plebeian brother. She is now no longer a resident of the clouds, but dwells on the solid earth. She stands by forge and anvil, loves the clatter of the factory, enters the workshop and pre-

sides over the combinations which give soul to matter, lingers in dingy corners where the pale mechanic thinks out the problems which revolutionize art, hovers round the swarthy brow and clings to the calloused hand of labor. She has become democratic, wears homespun, and keeps company with paper caps and leather aprons, as though she were a candidate for office and wanted votes. There was a time when she lived in lordly halls and moved among the mighty of the earth, but her taste and manners have been improved, and she has become, at last, a useful member of society.

There is an *ignis fatuus*, men call genius, which leads them a weary chase over many a quagmire, swamping some and leaving others so begrimed with their unprofitable travel, that no vestige remains of the freshness with which they started. To follow this they abandon the firm ground, for which nature intended them, and, forfeiting the respectability of mediocrity, sink into hopeless insignificance, after vainly striving for immortality.

Parental pride is aroused when an idle boy, in some unfortunate moment, pinches crumbs of bread unto a likeness of a human face, or disfigures the barn door with a representation of some denizen of the farm-yard, the horns solving the dilemma whether the prodigy is intended for a cow or a horse. A spark of light divine is supposed to have fallen on the family, and the young maker of dough faces must relinquish the hoe for the brush or the chisel. A very competent farmer is spoiled to make a very indifferent artist, and instead of dwelling in his proper sphere, among scenes of nature, he is sent to cover the walls of a city attic with productions which insult and degrade her.

Young man, who art now toiling in thy mistaken vocation, looking for the inspiration which comes not and will never come, resign thy unprofitable task, and leave this

daubing of paint and kneading of clay. If thou wert born for the application of colors, it is the covering of clapboards, not of canvas that calls to thee: thy mission may be in stone, but it is the handling of granite, not the chipping of marble — the laying of one fragment upon another, in the elongated and substantial form adopted for land boundaries. Flourish thy palette, cut and carve as thou wilt, the ideal, that is not in thee, cannot be given to the dead things thou art striving to torture into life. After all thy grimaces and contortions, there will only be before thee a piece of party-colored cloth, or a cold, misshapen block. Return to the old homestead; the garden is growing to weeds, and the tumbling fences will rejoice in thy handiwork: or go back to thy old craft, whatever it was, and resume it like a man. It is as honorable as the one of thy adoption, and will bring, with more lucrative consequences, the consciousness of being once more in a congenial element.

Perfection in high art comes at long intervals, and ages go by without a beam of light to show that it is not utterly erased from the power of men. Phidias and Buonarrotti do not come back, though Canova and Thorwaldsen have lived. Raphael and Titian are fading away, and no hand catches the soul of their productions, which will, at no distant day, live only in song and story. Followers, like autumn leaves, have strewed over the land where they lived and died, striving, in humble imitation, to rekindle the flame, but it comes not at their bidding. Prometheus worked in vain until he brought down fire from heaven, and art is worthless without the divine enthusiasm which gives it life. The Florentine sculptor felt its glow, who, on finishing his statue, with the last stroke threw down the chisel and exclaimed, "Speak, speak now! I am sure you can."

The tame, dull plodding, that wears away the tedious

years, has no affinity with genius, though the latter is a useless gift without the patient labor which teaches it to direct itself. The mightiest names that have been chronicled of human talent, bent down to work, and only secured their fame by severe devotion to the principles of art. They felt that genius was an unavailable incumbrance without instruction, and drawing around them kindred sciences, made them tributary to the divinity within them.

The history of painting, traced by its productions, is a singular commentary on the relation of that art to the character of the age in which it flourished. During the period of its greatest excellence it was fettered by the church, and its flight so impeded by ghostly legends and saintly mysteries, that it was not, in succeeding years, wholly able to divest itself of those influences. In more modern times, historical painting has been superseded by that demand which consults the happiness of posterity, and makes provision to convey, to an approving future, the form and expression which, no doubt, charm their cotemporaries. If there is any truth in the samples which decorate the walls of ancient habitations, the past has had a severe drain on its admiration, and wonder is excited, whether such men and women really existed, or were wrought out from the pasteboard imagination of the artist. Whether our amiable predecessors, having been duly starched for the occasion, gave rigid instructions, or the painter considered it his duty to disregard the softer emotions and hand down only the austere and unimpressible, may be placed among the mootable questions. But, if such pictures are faithful delineations of the past, what a grim ancestry we must have had! It was, surely, made for stern things only, for a smile could never have passed over such faces without cracking every feature.

If the world does not grow wiser as it grows older, it certainly assumes a more benignant aspect, if we may

judge from the specimens of its inhabitants, which look joyously from the walls of modern picture galleries, gleam radiantly through the windows of print-shops, stand round the rooms of artists, in all stages of unfinished sunshine, and, gorgeous and glossy in gold and varnish, preside over the domestic hearth with that never-failing benevolence and equable serenity which, it may be presumed, invariably characterize the originals. If our forefathers frown upon us in awful majesty, there is compensation in the thought, that we shall descend with a perpetual smirk, gladdening unborn generations with the pleasant fantasy that the period has been when Time left no furrows behind him, but glided with such feathery footsteps that the blooming cheek and the raven hair were left to luxuriate in perennial summer. When Cromwell sat for his portrait he said, "Paint me as I am, warts and all!" We, by no means, give such vulgar injunctions; and the artist who does not ignore blemishes, jump over wrinkles, and melt those flurries of snow, which obstinately persist in alighting on the uncovered head, is either perversely opposed to propriety, or shamefully ignorant of the first principles of success.

The last few years have seen a competition which has been instrumental of great good, and done much to bring nations in mutual intercourse. It is a cheering sign that the example is followed and likely to be continued. The great project, commenced so boldly and carried through with such distinguished success in England, is repeated in this country; and though comparison may fail, with that mighty effort which called forth the energies of a whole people, and the warmest patronage from a source most likely to ensure a favorable result, yet, had that never existed, the "crystal palace" on these shores would fill all thoughts, and command admiration as one of the wonders of the age. All hail to this generous emulation, the gath-

ering of the products of the earth and the kindly communion of earth's children,—a guaranty that the blessings of industry, in encouraging national courtesy, will perpetuate national friendship.

The interchange of the productions of various lands gives material for fresh thought, and introduces a knowledge which extends beyond an acquaintance with new objects of art. Teachings arise which transcend luxury or comfort, and, as novel wants are gratified, information is diffused on far-off shores, which will bring them, at last, in harmony with the human family.

Say, now, to the native of Sumatra or Borneo that, in our northern winter, water hardens into stone, and that men walk securely on its surface, and he either thinks you crazy, or says, without circumlocution, that you lie; for men in those regions have simple languages, which define their thoughts, and the poor heathen creatures are not yet sufficiently civilized to shoot at one another for calling things by their right names. Tell him that the solid rocks run like molten lead under our summer's sun, and that fish are taken, ready cooked, from our boiling rivers, and you redeem your character as a truthful person. He feels that this may be so. It is only rather hotter than his own country.

But alas! the reign of imagination is passing away. The severe and ubiquitous schoolmaster is equalizing fancy and sober fact. The Captain's foot no longer weighs just one pound, on the "Pepper Coast," and its inhabitants have discovered that pewter dollars are of less intrinsic value than silver. The Ice ship has entered the Java and China seas, and the incredulous savage is inevitably doomed, hereafter, to add one more article to the necessities of life.

It has been held that he is a public benefactor who causes two blades of grass to grow where one grew.

before. If that character is equally due to him who discovers new fields for the operations of industry, and converts hitherto worthless productions into useful agents for the improvement or comfort of life, the man who first sent a cargo of ice to the Torrid Zone is entitled to respectful and grateful consideration. The thought that toiled in secret, working out the problem till conviction came, was no strange fancy, cherished for its apparent wildness and delighting in the seeming impossibility of its own chimerical creation. But a process of careful and scientific investigation satisfied the discoverer that his theory was practicable; and disregarding alike the laughter which derided, and the counsels which discouraged, and bearing bravely up through all the obstacles which thronged thickly around him, he persevered until he introduced a new element to enterprise, and gave an added character and importance to commerce.

Ice and Granite, it is said, are the chief products of New England; and they fitly symbolize the hardy character of her sons. It seems to be a universal law, that in those regions where Nature sparingly gives forth her bounties, and the coy earth reluctantly responds to the attentions of the husbandman, moral worth increases and manly virtues find more room for development. Blessed is the land whose children must work to live. The luxury that heralds decay, finds no congenial resting place where toil is both necessary and honorable; and the surest pledge of enduring prosperity is found where industry is the ruling influence. Labor is the magic talisman that transmutes our rocks into gold, and sends our lakes and rivers to temper the sun in his own dominions. It converts our barren hills to grain fields, covers the wilderness with its foot-prints, and raises factories, and villages, and cities, with a celerity which seems the result of mere volition rather than the agency of human hands.

It has made us what we are ; and if we care for the preservation of our patrimony, and feel a generous pride in our distinctive character, we must acknowledge and honor it. Yes, labor is the power of New England. She has fortunately nothing else to sustain her, and must fall back on this. Whatever encourages it, and gives to the working man an incentive to persevere in his employment, aids the great cause of human progress. Never have the mechanic arts, in the history of our race, attained to their present perfection. It has been reserved for this age to witness improvements, which shame the mightiest efforts of all past time ; and it is the glory of the land in which we live, that industry has made a sterile country the populous home of a prosperous, moral, and intellectual people. Much has been accomplished, but more remains to be done. We must not fold our arms, and be passed by our competitors while we are gazing complacently on our work. There is no goal in the race on which we have entered ; no truce to the friendly battles in which we are engaged. We have enlisted for the whole war, and it will only end with life.

The mechanic's duty is not, now, mere manual drudgery, an unthinking task, in which the head has no part ; but all the attributes around him stimulate to mental culture. Science offers him her assistance, and the researches of the library and laboratory are lavishly poured out before him. The secrets of nature unfold to him new principles of action and unaccustomed springs of power. The wise man feels that he knows nothing while something remains to be learned, and does not halt in his career because his first efforts are successful. The accessories to mechanical art are continually multiplying, and the accomplished artificer must increase his knowledge as he advances, and gather around him all the collateral tributaries to his calling. There is no portion of the globe where his advan-

tages are greater than with us ; and it may be added, without suspicion of bad taste for a mere unmeaning compliment, that the world does not contain a class of men, more distinguished for high honor, acquirement, and intelligence, than the Mechanics of New England. They form a body which, more than any other, is indispensable to society. All the ore that can be drained from the distant shores of the Pacific, would poorly compensate for the loss sustained in those who have been attracted from us by the lure of gold. The hope of rapid accumulation has robbed us of some of our best mechanics. Men whose skill and experience insured them competency and consideration, have wasted their long-earned knowledge, in toiling side by side with rude and uninformed labor, seeking, in the unequal struggle, the independence they abandoned here. They left behind them some whom we could have been prevailed upon to spare, even with cheerful resignation. It has been said of our revolutionary heroes that "many a little Cæsar preferred being something in the Alps to being nothing at Rome." But, in these degenerate days, there is a more domestic though less glorious phase of patriotism, which shuns the rough encounter with a world that requires the stirring action of brain and hands, and clings with death-like tenacity, to the repose of home, though it may end in prison or almshouse.

The well-founded prosperity, which is built up by labor, is not a plant of sudden growth. It attains maturity by such gradual processes, that the annals of years can only mark its progress. But what is reared by ages of patient care, may tumble at once in ruins, when touched by unskilful or wicked hands.

" A thousand years scarce serve to form a state ;
An hour may lay it in the dust."

The patronage of government is less necessary to the arts than the forbearance of that intermeddling which de-

ranges without aiding them. They will thrive without intervention, if left in peace. But the reckless rule, which consults the advancement of parties or politicians, at the expense of public faith and the general good, checks their course and involves their welfare in its unhallowed ambition.

The future policy of this country is in the hands of the industrial classes, and will be dealt out by them, whether for weal or woe. Would they could impress upon our government, under whatever control, that the homely but excellent adage, "MIND YOUR OWN BUSINESS," is equally applicable to states as to men ; that without an adherence to it, there can be no success in commerce or the arts ; and that the country which departs from it, forgetting the wisdom of its fathers, and entangling itself in foreign crusades, or in promoting domestic cupidity, alike unmindful of international right and courtesy, and the true interests of its most valuable citizens, may find that there is no destiny but divine justice, which watches over all and will prevail at last.

In the heathen mythology, Fate was superior to Jove. In the Christian Creed, "there is one God ; and there is none other but He."

10 -
ARCHIMEDES AND FRANKLIN

THE NEW YORK
PUBLIC LIBRARY
P 37059
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1899.

A

LECTURE,

INTRODUCTORY TO A COURSE ON THE

APPLICATION OF SCIENCE TO ART,

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

NOVEMBER 29, 1853.

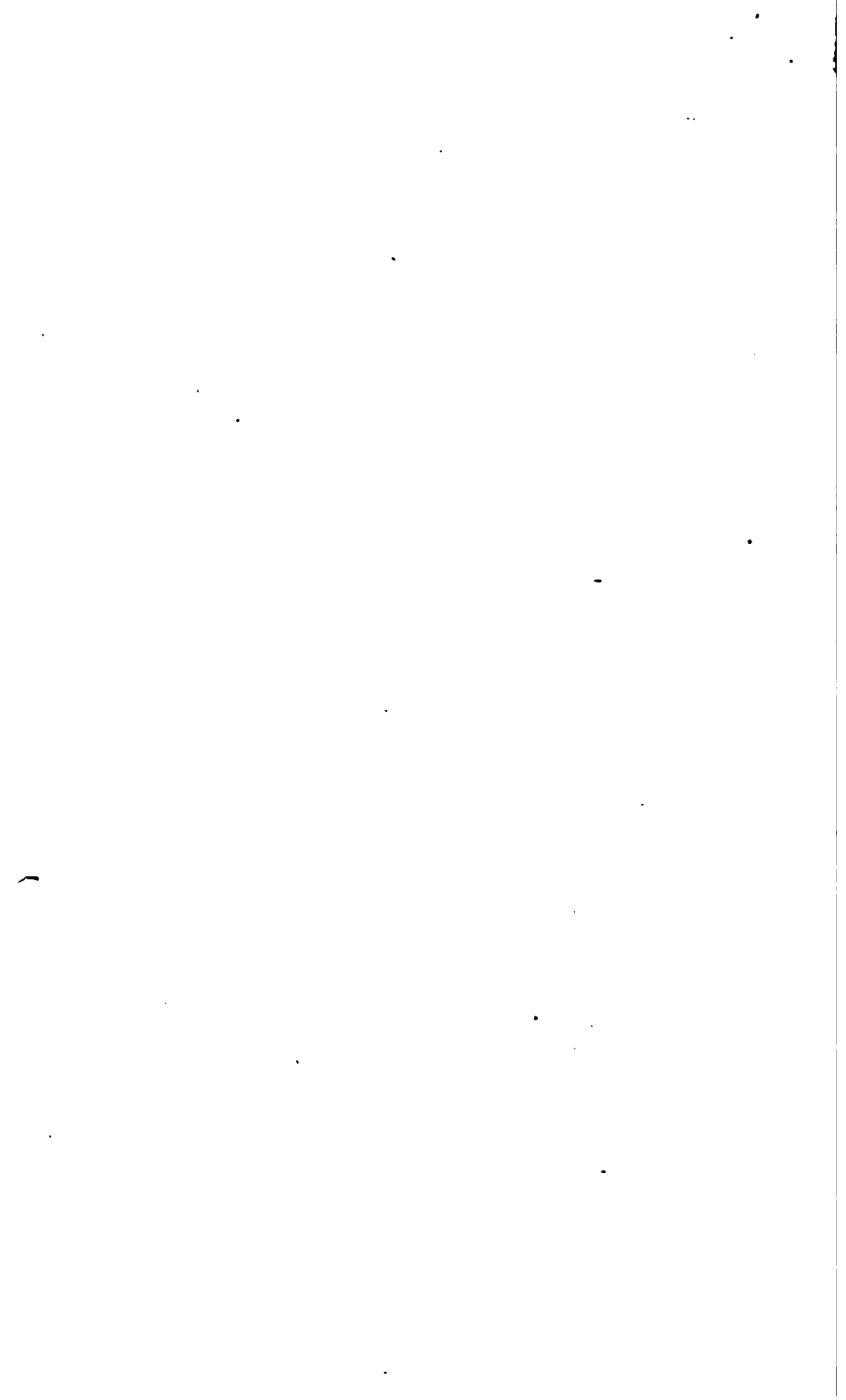
BY ROBERT C. WINTHROP.

SECOND EDITION.

★ **MASS. HIST. SOC.**
BOSTON:

PRESS OF T. R. MARVIN, 42 CONGRESS STREET.

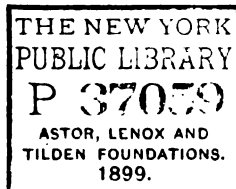
1854.



*... all
ankin (Benjamin) (I.C)*

ARCHIMEDES AND FRANKLIN.

**A
LECTURE,**



INTRODUCTORY TO A COURSE ON THE

APPLICATION OF SCIENCE TO ART,

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

NOVEMBER 29, 1853.

BY ROBERT C. WINTHROP.

SECOND EDITION.

BOSTON:
PRESS OF T. R. MARVIN, 42 CONGRESS STREET.
1854.

R. T. H.

BOSTON, DECEMBER 8, 1853.

HON. ROBERT C. WINTHROP:

Dear Sir,—At a meeting of the Government of the Massachusetts Charitable Mechanic Association, held last evening, the Lecture Committee were instructed to present to you, in behalf of the Association, the thanks of the Board for the eloquent and interesting address delivered by you on the evening of the 29th ult. as the Introductory Lecture to the present course.

They were also further instructed to request a copy for the press, and to make all necessary arrangements for its publication and distribution to the members and the public.

The Committee hope it will suit your convenience to furnish us the manuscript at an early day, in order that it may awaken the public sentiment of our city, to the propriety of erecting a Statue of Franklin in the place of his birth. The force and pertinence with which you urged this measure in your address, will serve to quicken the hearts of our people in its behalf; and its publication no doubt will be followed by that energetic action which will secure the final success of the project.

We remain,

Truly yours, &c.,

F. W. LINCOLN, JR.
FRED. H. STIMPSON,
OSMYN BREWSTER,
JOSEPH M. WIGHTMAN,
ALBERT G. BROWNE,
Committee.

BOSTON, 14 DECEMBER, 1853.

GENTLEMEN:

I am greatly gratified by the proceedings of the Government of the Massachusetts Charitable Mechanic Association, in reference to the Introductory Lecture which I had the honor to deliver before them on the 29th ult.

I cannot hesitate a moment to place my manuscript at their disposal, and I pray you to present to them, and to accept for yourselves, my sincere thanks for the very kind and complimentary terms in which the request was made and communicated.

Believe me, gentlemen,

With true regard,

Your friend and servant,

ROBERT C. WINTHROP.

F. W. LINCOLN, JR.
FRED. H. STIMPSON,
OSMYN BREWSTER,
JOSEPH M. WIGHTMAN,
ALBERT G. BROWNE, *Esquires,*
Committee.

LECTURE.

A CHARMING story which has come down to us in reference to the great orator, philosopher, and patriot of ancient Rome,—and which he has not thought it unworthy to tell briefly of himself, in one of his *Tusculan Disputations*,—may form a not inappropriate introduction to the Lecture which I am here this evening to deliver.

While Cicero was quæstor in Sicily,—the first public office which he ever held, and the only one to which he was then eligible, being but just thirty years old, (for the Roman laws required for one of the humblest of the great offices of state the very same age which our American Constitution requires for one of the highest,)—he paid a visit to Syracuse, then among the greatest cities of the world.

The magistrates of the city, of course, waited on him at once, to offer their services in showing him the lions of the place, and requested him to specify anything which he would like particularly to see. Doubtless, they supposed that he would ask immediately to be conducted to some one of their magnificent temples, that he might behold and admire those splendid works of art with which,—notwithstanding that Marcellus had made it his glory to carry not a few of them away with him for the decoration of the Imperial City,—Syracuse still abounded, and which soon after tempted the cupidity, and fell a prey to the rapacity, of the infamous Verres.

Or, haply, they may have thought that he would be curious to see and examine the ear of Dionysius, as it was called,—a huge cavern, cut out of the solid rock in the shape of a human ear, two hundred and fifty feet long and eighty feet high, in which that execrable tyrant confined all persons who came within the range of his suspicion,—and which was so ingeniously contrived and constructed, that Dionysius, by applying his own ear to a small hole, where the sounds were collected as upon a tympanum, could catch every syllable that was uttered in the cavern below, and could deal out his proscription and his vengeance accordingly, upon all who might dare to dispute his authority, or to complain of his cruelty.

Or they may have imagined, perhaps, that he would be impatient to visit at once the sacred fountain of Arethusa, and the seat of those Sicilian Muses whom Virgil so soon after invoked in commencing that most inspired of all uninspired compositions, which Pope has so nobly paraphrased in his glowing and glorious Eclogue—the Messiah.

To their great astonishment, however, Cicero's first request was, that they would take him to see the tomb of *Archimedes*. To his own still greater astonishment, as we may well believe, they told him in reply, that they knew nothing about the tomb of Archimedes, and had no idea where it was to be found, and they even positively denied that any such tomb was still remaining among them.

But Cicero understood perfectly well what he was talking about. He remembered the exact description of the tomb. He remembered the very verses which had been inscribed on it. He remembered the sphere and the cylinder which Archimedes had himself requested to have wrought upon it, as the chosen emblems of his eventful life. And the great orator forthwith resolved to make search for it himself.

Accordingly, he rambled out into the place of their ancient sepulchres, and, after a careful investigation, he came at last to a spot overgrown with shrubs and bushes, where presently he descried the top of a small column just rising above the branches. Upon this little column the sphere and the cylinder were at length found carved, the inscription was painfully decyphered, and the tomb of Archimedes stood revealed to the reverent homage of the illustrious Roman quæstor.

This was in the year 76 before the birth of our Saviour. Archimedes died about the year 212 before Christ. One hundred and thirty-six years, only, had thus elapsed since the death of this celebrated person, before his tombstone was buried up beneath briars and brambles, and before the place and even the existence of it were forgotten, by the magistrates of the very city, of which he was so long the proudest ornament in peace, and the most effective defender in war.

What a lesson to human pride, what a commentary on human gratitude, was here! It is an incident almost precisely like that which the admirable and venerable Dr. Watts imagined or imitated, as the topic of one of his most striking and familiar Lyrics:—

“Theron, amongst his travels, found
A broken statue on the ground;
And searching onward as he went,
He trac’d a ruin’d monument.
Mould, moss, and shades had overgrown
The sculpture of the crumbling stone,
Yet ere he pass’d, with much ado,
He guess’d, and spell’d out, Sci-pi-o.
‘Enough,’ he cried; ‘I’ll drudge no more
In turning the dull stoics o’er;
• • • • •
For when I feel my virtue fail,
And my ambitious thoughts prevail,
I’ll take a turn among the tombs,
And see whereto all glory comes.’”

I do not learn, however, that Cicero was cured of his

eager vanity and his insatiate love of fame by this 'turn' among the Syracusan tombs. He was then only just at the threshold of his proud career, and he went back to pursue it to its bloody end, with unabated zeal, and with an ambition only extinguishable with his life.

And after all, how richly, how surpassingly, was this local ingratitude and neglect made up to the memory of Archimedes himself, by the opportunity which it afforded to the greatest orator of the greatest Empire of antiquity, to signalize his appreciation and his admiration of that wonderful genius, by going out personally into the ancient graveyards of Syracuse, and with the robes of office in their newest gloss around him, to search for his tomb and to do honor to his ashes! The greatest orator of Imperial Rome anticipating the part of Old Mortality upon the gravestone of the great mathematician and mechanic of antiquity! This, surely, is a picture for mechanics in all ages to contemplate, with a proud satisfaction and delight.

In opening a Course of Lectures on the application of Science to Art, under the auspices of the Massachusetts Charitable Mechanic Association, I have thought that, instead of any vague generalities upon matters and things which they understand already as well and better than I do, a brief notice of that great mathematical and mechanical Genius, at whose grave Cicero thought it no scorn to do homage, and who may be taken, in some sort, as the very personification of the idea of *Science applied to Art*, would not be uninteresting or unwelcome.

You have adopted Archimedes, Mr. President, as your Patron Saint. You have emblazoned his form on your certificate of honorary membership, as I have had the most agreeable opportunity of knowing. Yet it would not be surprising if, to some of those before me at this

moment, the details of his story were hardly more familiar than they seem to have been to the people of Syracuse, when Cicero visited them nineteen hundred and twenty-nine years ago,—and as they certainly were to myself, I may add, before I entered on the preparation of this Lecture.

Let me then inquire, for a moment, who this Archimedes was, and what was his title to be thus remembered and revered, not merely by the illustrious orator of the Augustan era, but by the American mechanics of the nineteenth century. And in doing this, I may perhaps find occasion to compare his character and his services with those of some one or more of the great inventors and mechanics of our own day and of our own land.

Archimedes was born in the year 287 before the Christian era, in the island of Sicily and city of Syracuse. Of his childhood and early education we know absolutely nothing, and nothing of his family, save that he is stated to have been one of the poor relations of King Hiero, who came to the throne when Archimedes was quite a young man, and of whose royal patronage he more than repaid whatever measure he may have enjoyed. He is stated, also, to have traveled into Egypt in his youth, and to have been a pupil of Conon, a celebrated Samian astronomer, whose compliment to Berenice, the Queen of Ptolemy Euergetes, will not be in danger of being forgotten, as long as the sparkling constellation to which he gave the name of *Coma Berenices*, in honor of her golden locks, shall still be seen glittering in our evening sky. I know not what other lady has secured so lofty a renown, until, indeed, the accomplished Maria Mitchell, of Nantucket, wrote her own name upon the golden locks of a comet, discovered by her in 1847.

Neither royal patronage, however, nor the most learned and accomplished tutors of Egypt or of Greece, could have made Archimedes what he was. His was undoubt-

edly one of those great original minds, which seem to owe little to anybody but their Creator; which come into existence ready trained and furnished for some mighty manifestation, and to which the accidents of life and of condition supply nothing but occasions and opportunities. Pallas springing full-armed from the brain of Jove, is the fabulous and familiar prototype of a class of persons, whose powers and whose productions can be attributed to nothing but a divine genius, and of whom Homer, and Socrates, and Shakspeare, and Sir Isaac Newton,—upon whose statue at Cambridge, in Old England, may be seen the proud inscription, that he surpassed the human race in intellectual power,—will everywhere suggest themselves as examples..

To this order of minds, Archimedes unquestionably belonged. He has been well called, by a French philosopher, "The Homer of Geometry." It has been said of him by those entitled to pronounce such a judgment, that his theory of the lever was the foundation of statics till the discovery of the composition of forces in the time of Sir Isaac Newton; that no essential addition was made to the principles of the equilibrium of fluids and floating bodies, established by him, in his treatise "*De Insidentibus*," till the publication of Stevins's researches on the pressure of fluids in 1608;* and again, "that he is one of the few men whose writings form a standard epoch in the history of the progress of knowledge," and that no further advance was made in the theory of mechanics after his death, until the days of Galileo, who lived eighteen hundred years later.

You will all agree with me, I doubt not, that the man over whose theories and calculations eighteen centuries may fairly be said to have rolled, without obliterating their record, or even impairing their value and their

* Smith's Dictionary of Greek and Roman Biography.

importance, may well be numbered among the fixed stars of Science.

It is a striking fact, that Galileo himself, who may well-nigh be included in the same order of intellects, and who was the first to make any advance or improvement in the condition of science after this long interval,—prepared himself for pursuing his own great discoveries by perusing the writings of Archimedes. It was while studying the hydrostatical treatise of the old Syracusan philosopher, that he first conceived the idea of writing an essay on a kindred topic. It was that essay, in illustration of some of the discoveries of Archimedes, which gained for Galileo the favor of a patron, (Guido Ubaldi, the brother-in-law of Cardinal del Monte,) to whom he afterwards owed most of his worldly success.

Would that this high priest of the stars, as he has well been denominated, could have caught a little more seasonably something of the noble courage of the brave old Syracusan! Would that, when summoned before the Inquisition “for thinking in astronomy otherwise than the Franciscan and Dominican licensers thought,”—instead of making an ignominious and humiliating abjuration, he might have been seen boldly asserting to their teeth, those eternal truths which had been revealed to him; and accepting, if so it must have been, that crown of martyrdom, which would have come to him “plaited with immortal laurels!”* I know of no scene in history more derogatory to the character of poor human nature, or more derogatory to the dignity of science, than that of Galileo on his knees before the Inquisitors, recanting that great doctrine of the motion of the earth around the sun which it was his glory to have established; and the sublime exclamation which he is related to have made in a whisper, to a friend at his elbow, as he rose from his

* Sir David Brewster's *Martyrs of Science*.

knees, "*It does move, notwithstanding,*"—only adds a deeper shade to our sense of his humiliation.

We shall have abundant evidence, that he did not derive this unworthy spirit of submission from a study of the life of Archimedes. He might rather be supposed to have caught the idea, that such a stooping to arbitrary power was not inconsistent with the beauty and nobleness of his general character,—from the example of that leaning tower of Pisa, upon whose summit Galileo is known to have stood, in performing some of his experiments and in taking not a few of his observations, and whose unaccountable deflection from a plumb-line seems to have attracted more admiration in some quarters even than the beauty of its proportions or the purity of its material.

It would be tedious and unprofitable to attempt any detailed account, on such an occasion as this, of the writings of Archimedes. He left many works of a scientific character,—treatises on the quadrature of the parabola, on equilibrium and the centres of gravity, on spirals and spheroids and conoids, on the possibility of numbering even the sands on the seashore,—a treatise in which he is said to have anticipated the modern method of logarithms, —and particularly on the sphere and cylinder, his discovery of the precise ratios of which to each other, he evidently regarded as the master-work of his life, when he selected these emblems for that forgotten tombstone which Cicero searched for and found.

All these writings, however, were in the cause of pure, abstract, unapplied science; and had his labors ended here, his name would have had little claim to the reverence of a Mechanic Association, and his character and career would have had still less interest for a general audience. It was by the application of science to art,—it was by the conversion of the results of his profound investigations and marvelous inventions to the direct

advantage of his fellow-men, and to the immediate advancement of his country's welfare, that he earned his chief title to be remembered with admiration and gratitude by the great mass of mankind.

It must be acknowledged, however, at the outset, that there is too much reason for supposing, that most of what he did in this way was prompted by but little feeling of personal respect for anything of practical art, and by but little original impulse of philanthropy. He lived at a day when it was not thought quite consistent with the dignity of a philosopher to busy himself with any of the common affairs or common interests of society. Plutarch tells us, that "the first that turned their thoughts to *Mechanics*, a branch of knowledge which came afterwards to be so much admired, were Eudoxus and Archytas, who thus gave a variety and an agreeable turn to Geometry, and confirmed certain problems by sensible experiments and the use of instruments, which could not be demonstrated in the way of theorem." "But," he adds, "when Plato inveighed against them with great indignation, as corrupting and debasing the excellence of Geometry, by making her descend from incorporeal and intellectual to corporeal and sensible things, and by thus obliging her to make use of matter, which requires much manual labor and is the object of servile trades, then *Mechanics* were separated from Geometry, and being a long time despised by the philosophers, were considered only as a branch of the military art."

In another place, in speaking of some of the great machines which Archimedes invented, he says,—“Yet Archimedes had such a depth of understanding, such a dignity of sentiment, and so copious a fund of mathematical knowledge, that though in the invention of these machines he gained the reputation of a man endowed with divine rather than human knowledge, yet he did not

vouchsafe to leave behind him any account of them in writing. For he considered all attention to *Mechanics*, and every art that ministers to common uses, as mean and sordid, and placed his whole delight in those intellectual speculations, which, without any relation to the necessities of life, have an intrinsic excellence arising from truth and demonstration only."

The old Greek biographer, indeed, seems disposed even to apologize for the great Geometrician, by representing him, in his mechanical inventions, as yielding reluctantly to the importunity of his royal relative. "He did not think the inventing of them (says he) an object worthy of his serious studies, but only reckoned them among the amusements of Geometry. Nor had he gone so far, but at the pressing instance of King Hiero, who entreated him to turn his art from abstracted notions to matters of sense, and to make his reasonings more intelligible to the generality of mankind by applying them to the uses of common life."

Thus, according to Plutarch's account, it is King Hiero, who deserves the credit of having originally prompted that "application of Science to Art," which is to be the subject of your Lectures, and which is the great secret and source of the wonderful inventions and improvements of modern times. And a brave and noble fellow this Hiero certainly was,—Hiero the Second, King of Syracuse,—who, during a reign of more than half a century, devoted himself to promoting the arts of peace, adorning the city over which he reigned with numberless works of public utility as well as of great magnificence, while he ruled his people with an almost republican simplicity, and with much of the substance, and not a few of the forms, of a free constitutional government.

A modern commentator on the character of Archimedes* seems to think that Plutarch "confounded the

* Professor Donkin of Oxford.

application of geometry to mechanics with the solution of geometrical problems by mechanical means," and that he is mistaken in representing Archimedes as despising all mechanical contrivances and practical inventions. I would gladly believe that this is a true theory, but I confess to a good deal of distrust for these corrections of history eighteen hundred years after it was written, and in regard to points, too, upon which no new facts or new testimony have been, or can be, procured.

But whatever may have been the circumstances under which Archimedes originally turned his mind and his hand to mechanical inventions, and in whatever estimation he may himself have held the practical arts and sciences, the noble use to which he afterwards applied them, no less than the wonderful effects which he afterwards produced with them, will be enough to secure him an everlasting remembrance among men.

There is no more characteristic anecdote of this great philosopher, than that relating to his detection of a fraud in the composition of the royal crown. Nothing, certainly, could more vividly illustrate the ingenuity, the enthusiasm, and the complete concentration and abstraction of mind with which he pursued whatever problem was proposed to him.

King Hiero, or his son Gelon, it seems, had given out a certain amount of gold to be made into a crown, and the workman to whom it had been intrusted, had at last brought back a crown of corresponding weight. But a suspicion arose that it had been alloyed with silver, and Archimedes was applied to by the King, either to disprove or to verify the allegation. The great problem, of course, was to ascertain the precise bulk of the crown in its existing form; for gold being so much heavier than silver, it is obvious that if the weight had been in any degree made up by the substitution of silver, the bulk would be proportionately increased. Now it happened that Archim-

edes went to take a bath, while this problem was exercising his mind, and, on approaching the bath-tub, he found it full to the very brim. It instantly occurred to him, that a quantity of water of the same bulk with his own body must be displaced before his body could be immersed. Accordingly, he plunged in ; and while the process of displacement was going on, and the water was running out, the idea suggested itself to him, that by putting a lump of gold of the exact weight of the crown into a vessel full of water, and then measuring the water which was displaced by it, and by afterwards putting the crown itself into the same vessel after it had again been filled, and then measuring the water which this, too, should have displaced, the difference in their respective bulks, however minute, would be at once detected, and the fraud exposed. "As soon as he had hit upon this method of detection, (we are told,) he did not wait a moment, but jumped joyfully out of the bath, and running naked towards his own house, called out with a loud voice that he had found what he had sought. For, as he run, he called out in Greek, 'Eureka, Eureka.'"

No wonder that this veteran Geometer, rushing through the thronged and splendid streets of Syracuse, naked as a pair of his own compasses, and making the welkin ring with his triumphant shouts,—no wonder that he should have rendered the phrase, if not the guise, in which he announced his success, familiar to all the world, and that "Eureka, Eureka," should thus have become the proverbial ejaculation of successful invention and discovery in all ages and in all languages from that day to this !

The solution of this problem is supposed to have led the old philosopher not merely into this ecstasical exhibition of himself, but into that entire line of hydrostatical investigation and experiment, which afterwards secured him such lasting renown. And thus the accidents of a

defective crown and an overflowing bath-tub, gave occasion to some of the most remarkable demonstrations of ancient science.

At the instigation and under the auspices of this same King Hiero, Archimedes achieved another of his memorable triumphs, in the building of a ship of wonderful dimensions, far exceeding anything which had ever before been constructed; and which, if the accounts of its magnitude and its magnificence,—of its banqueting rooms, and galleries, and stables,—its baths, its fish-ponds, its temple of Venus, and its floors inlaid with scenes from Homer's Iliad,—be not greatly exaggerated, must have been a perfect floating city of itself, and must have been more than a match, in splendor and in size, if not in speed, even for the Great Republic of our worthy friend and fellow-citizen, Donald McKay.*

One might imagine that it was from the accounts which have come down to us of this marvelous vessel, that Shakspeare,—who, though he is said to have “had small Latin and less Greek,” yet always contrived to pick up whatever either Greek or Latin authors contained which could serve his turn and adorn his story or his style,—must have derived the idea of that gorgeous bark in which he represents Cleopatra—the serpent of old Nile—sailing down the Cydnus to make captive of the valiant but voluptuous Anthony :

“The barge she sat in, like a burnished throne,
Burned on the water; the poop was beaten gold;
Purple the sails, and so perfumed, that
The winds were love-sick with them; the oars were silver,
Which to the tune of flutes kept stroke.”

* While this Lecture is going through the press, the telegraph informs us that the Great Republic has been burned to the water's edge at New York. Every one will sympathize with Donald McKay in this sad disappointment, and will deeply regret that so noble a specimen of naval architecture should have met with so untimely a fate.

It seems to have been discovered too late, however, that Sicily had no harbor large enough for the permanent accommodation of this stupendous structure,—although Syracuse itself was famous for its capacious port, in which, even as late as the year 1798, ages after it had been supposed to be irrecoverably choked up with sand, the heroic Nelson, on his way to the glories of the Nile, found a safe and ample anchorage for a whole fleet of British frigates and ships of war,—watering his ships, in the meantime, at the fountain of Arethusa, and writing to a friend that *that alone* was an ample recipe for victory. At any rate, on this account or some other, this huge vessel was sent off as a present to Ptolemy, King of Egypt, laden with corn enough to supply almost the whole demand of an immediate national scarcity. Now, one of the Ptolemies is said to have had a ship (280 cubits) 420 feet long, and (48 cubits) 72 feet deep, which is nearly 100 feet longer and 33 feet deeper than the Great Republic, and which required four thousand four hundred rowers and other mariners, and was capable of accommodating three thousand soldiers besides—a ship which the great historian Gibbon, in one of his notes, quotes Dr. Arbuthnot as having estimated at four and a half times the tonnage of an English hundred-gun ship! If the ship which Archimedes built was larger and more capacious still, as, under the circumstances, must be presumed, he may fairly be set down as having outdone even the foremost and most adventurous of our East Boston shipbuilders, in the construction of these monsters of the deep; notwithstanding the recent suggestion that Donald McKay can be nothing less than a lineal descendant of the great Ark-builder, father Noah himself.

It must be remembered, however, that there was no ocean navigation in those days to try the strength of her hull, or test the stiffness of her ribs, and that rowing her across the Mediterranean was a very different thing

from giving her to the breeze upon the broad Atlantic. Even for the short voyages of that day, the charming Roman Lyric tells us that there was no great confidence to be placed in these painted and ornamented ships; and I imagine there is very little doubt which of the two vessels any of us would prefer for a voyage to Canton or San Francisco, or even for a trip to Dover. It must not be forgotten, either, that the Sicilian ship did not obey the magic voice of its master builder, as the Great Republic did in the sight of us all in her late majestic and sublime descent into her destined element, with all her bravery on and streamers waving;—but required, we are told, the aid of a powerful and ponderous screw, which Archimedes was obliged to invent, and did invent, for the express purpose of launching her.

But this was not the only screw which Archimedes invented. You are all acquainted with another which bears his name to this day, which, I believe, is often called the water-snail,—and which is sometimes said to have been originally contrived for pumping water out of the hold of this same gigantic ship, and by others as having been invented by him, while in Egypt, for raising the waters of the Nile to irrigate the lands which were above the reach of the river.

It would occupy too much of my time to enter into any detailed account or enumeration of all the inventions which are ascribed to this wonderful man. Nothing seems to have been above or below the reach of his inventive faculties, from a Chinese puzzle to exercise the ingenuity of children, to an orrery illustrating the movements of the heavenly orbs. Nothing seems to have been too difficult for his accomplishment, from an hydraulic organ,—producing music, I dare say, almost as delightful in that day, as can be drawn by any of the fair fingers

before me from one of your President's* grand piano fortes in this,—to that amazing combination of ropes and wheels and pulleys, by means of which, with a slight motion of his hand at the end of a machine which he had contrived for the purpose, he is said to have drawn towards himself, from a considerable distance and upon the dry land, one of the largest of the King's galleys, fully manned and fully laden, in as smooth and gentle a manner as if she had been under sail upon the sea!

It was this last achievement which induced the astonished Hiero to intercede with the philosopher to prepare for him a number of engines and machines which might be used either for attack or defence in case of a siege. Hiero, it seems, thus early adopted the prudent maxim of our own Washington, "In peace, prepare for war." Like Washington, however, he maintained always a pacific and paternal policy, and he finished a reign of almost unequaled duration, without having been obliged to resort to the marvelous enginery with which Archimedes was prevailed upon to provide him.

But the time at length came round, when Syracuse was to need that enginery; and fortunately the old engineer was himself alive and at hand, to superintend and direct its application.

Old Hiero died at ninety years of age, after a reign of fifty-four years. He had made peace with the Romans and become their ally, soon after his accession, and he resolutely adhered to them until his death. His son Gelon had died before him, and he was, therefore, succeeded on the throne by his grandson, Hieronymus, a boy of fifteen years of age, who was flattered and seduced by the emissaries of Hannibal into an alliance

* A few days only after the delivery of this Lecture, the excellent President of the Association, JONAS CHICKERING, Esq., was struck down by apoplexy and died. The remembrance of his virtues and his charities will be long and gratefully cherished by our whole community.

with the Carthaginians. He was soon after basely assassinated by a band of conspirators in the Roman interest, and with him the whole race of Hiero was exterminated. A reaction in favor of the Carthaginian alliance having been the natural consequence of this atrocious massacre, Syracuse at once became a prey to foreign influences and entanglements, and suffered all the evils of a city divided against itself. A Roman fleet was accordingly despatched to turn the scale between the contending factions, and Marcellus was sent over to Sicily to assume the supreme command. But the recent cruelty and barbarity of Marcellus in scourging and beheading, in cold blood, two thousand of the Roman deserters at the siege of Leontini, had roused up all the friends of Rome in Syracuse against him, and they absolutely refused to acknowledge his authority, or even to admit him into the city.

Thence arose that last and most famous siege of Syracuse,—a siege carried on both by land and sea,—Marcellus commanding the fleet, and Appius Claudius the army. The Roman army was large and powerful, invincible and irresistible, as it was supposed, by any force which Syracuse could furnish, whether Carthaginian or Sicilian. It was flushed, too, by recent victory, being fresh from storming the walls of Leontini, which it had accomplished as easily—(to borrow Dr. Arnold's Homeric comparison)—“as easily as a child tramples out the towers and castles which he has scratched upon the sand of the sea-shore.”

“But at Syracuse, (continues this admirable historian and excellent man, whose description could not be mended,) it was checked by an artillery such as the Romans had never encountered before, and which, had Hannibal possessed it, would long since have enabled him to bring the war to a triumphant issue. An old man of seventy-four, a relation and friend of King Hiero, long

known as one of the ablest astronomers and mathematicians of his age, now proved that his science was no less practical than deep ; and amid all the crimes and violence of contending factions, he alone won the pure glory of defending his country successfully against a foreign enemy. This old man was Archimedes.

“Many years before, he had contrived the engines which were now used so effectively. Marcellus brought up his ships against the sea-wall of Achradina, and endeavored by a constant discharge of stones and arrows to clear the walls of their defenders, so that his men might apply their ladders, and mount to the assault. These ladders rested on two ships lashed together, broadside to broadside, and worked as one by their outside oars ; and when the two ships were brought close up under the wall, one end of the ladder was raised by ropes passing through blocks affixed to the two mastheads of the two vessels, and was then let go, till it rested on the top of the wall. But Archimedes had supplied the ramparts with an artillery so powerful that it overwhelmed the Romans before they could get within the range which their missiles could reach ; and when they came closer, they found all the lower part of the wall was loopholed ; and their men were struck down with fatal aim by an enemy they could not see, and who shot his arrows in perfect security. If they still persevered and attempted to fix their ladders, on a sudden they saw long poles thrust out from the top of the wall like the arms of a giant ; and enormous stones, or huge masses of lead, were dropped upon them, by which their ladders were crushed to pieces, and their ships were almost sunk. At other times, machines like cranes, or such as are used at the turnpikes in Germany, and in the market gardens round London, to draw water, were thrust out over the wall ; and the end of the lever, with an iron grapple affixed to it, was lowered upon the Roman ships. As soon as the grapple had taken hold,

the other end of the lever was lowered by heavy weights, and the ship raised out of water, till it was made almost to stand upon its stern ; then the grapple was suddenly let go, and the ship dropped into the sea with a violence which either upset it or filled it with water. With equal power was the assault on the landside repelled ; and the Roman soldiers, bold as they were, were so daunted by these strange and irresistible devices, that if they saw so much as a rope or a stick hanging or projecting from the wall, they would turn about and run away, crying, ‘ that Archimedes was going to set one of his engines at work against them.’ Their attempts, indeed, were a mere amusement to the enemy, till Marcellus in despair put a stop to his attacks ; and it was resolved merely to blockade the town, and to wait for the effect of *famine* upon the crowded population within.” *

Plutarch represents Marcellus, in this strait, as laughing outright at his own artillerymen and engineers, and as exclaiming, “ Why do we not leave off contending with this mathematical Briareus, who, sitting on the shore, and acting as it were but in jest, has shamefully baffled our naval assault ; and in striking us with such a multitude of bolts at once, exceeds even the hundred-handed giants in the fable ? ” And, in truth, (adds the old Greek biographer,) all the rest of the Syracusans were no more than the body in the batteries of Archimedes, while he himself was the informing soul. All other weapons lay idle and unemployed ; his were the only offensive and defensive arms of the city.

That, Mr. President, was the application of science to art with a witness to it, and in the noblest of all causes, the defence of one’s country. That was an illustration of the *one man power* which has never been surpassed, if ever equaled, since the world began. I know of few

* Arnold’s History of Rome, vol. iii. chap. 45.

things, certainly, more sublime, in the history of human actions, than the spectacle of this old patriot mathematician and mechanic holding Marcellus and the Roman power at bay by his single arm, and saving his native city so long by his unaided and overwhelming genius. It reminds one of nothing so much as of Milton's magnificent description of the heroic, renowned, irresistible Samson, as he calls him in the *Agonistes*, who

"Ran on embattled armies clad in iron ;
And, weaponless himself,
Made arms ridiculous, useless the forgery
Of brazen shield and spear, the hammered cuirass,
Chalibean-tempered steel, and frock of mail
Adamantean proof.
But safest he who stood aloof,
When insupportably his foot advanced,
In scorn of their proud arms and warlike tools,
Spurned them to death by troops. The bold Ascalonite
Fled from his lion ramp ; old warriors turned
Their plated backs under his heel ;
Or, groveling, soiled their crested helmets in the dust."

Samson's, however, you all remember, was mere physical strength, mere brute force, which, though it could defy a thousand swords and spears, yielded ingloriously at last to a single pair of scissors ; while that of Archimedes was the surpassing and almost superhuman power of intellect, overcoming all physical forces, and rendering them subservient and tributary to its own mighty will.

And now, who can remember this incomparable service which Archimedes rendered to his native city in the hour of its utmost peril, and then reflect upon the oblivion into which his tomb and almost his name seem so soon to have fallen,—even among the magistrates of Syracuse in Cicero's time,—without recalling that touching lesson upon human vanity and human ingratitude which has been left us by the Royal Preacher on the pages of Holy Writ ? One would almost imagine that Solomon was a

prophet, as well as a preacher and a poet, and was permitted to look forward, through the mist of eight centuries, to the very scene we have been witnessing :

“There was a little city, (says he,) and few men within it; and there came a great King against it, and besieged it, and built great bulwarks against it :

“Now there was found in it a poor wise man, and he by his wisdom delivered the city; yet no man remembered that same poor man.

“Then, said I, wisdom is better than strength; wisdom is better than weapons of war; nevertheless the poor man’s wisdom is despised, and his words are not heard.”

There is some confusion of dates in this part of Sicilian and Roman history; but it is calculated that a full year, at the very least, and perhaps two or even three years, elapsed, before Marcellus succeeded in overcoming the countless expedients of Archimedes, and in getting Syracuse into his possession. Among other marvelous means which the old philosopher is said to have employed to avert this catastrophe, was a combination of mirrors in the nature of burning glasses, by which ships were set on fire at the distance of a bowshot from the walls. Some doubt has been thrown upon this story, and it has given occasion to a great deal of philosophical experiment and controversy. The celebrated naturalist, Buffon, however, has abundantly proved that there was nothing impossible about it, having himself succeeded in “igniting wood at a distance of one hundred and fifty feet by means of a combination of one hundred and forty-eight plane mirrors,” and having, according to another account, by a combination of four hundred small mirrors, melted lead at the distance of one hundred and twenty feet, and set fire to a haystack at a much greater distance. And, after all, the account is not a whit more incredible at first view, than the recent experiment of Professor Faraday, who succeeded

in igniting gunpowder, by rays of the sun, transmitted through a lens of Wenham ice. Our friend, Sir Charles Lyell, is particular in telling us that it was *Wenham* ice which ignited the British gunpowder, and that British ice had too much salt, and too many bubbles in it, for a successful experiment.*

Syracuse was at last taken, and amid the general carnage by which the sack was attended, Archimedes was slain. The accounts of his death are not entirely uniform, but the most commonly received version is, that being engaged in some mathematical investigations, either in his own study or in the market-place, he was so absorbed by his calculations, that not even the tumultuous shouts of the Romans, rushing in triumph through the walls, awakened him to a realizing sense that the city was at length captured. Under these circumstances, a Roman soldier suddenly approached him, and ordered him to follow him to Marcellus. "Disturb not my circle," exclaimed the old philosopher. "Hold off for a moment, till I have finished my problem." But the soldier, in a fury, having no respect either for him or his theorem, drew his sword, and laid him dead at his feet. Marcellus, it is said, had given orders that his life should be spared,—perhaps, that he might be seen marching behind his chariot wheels, among the captives, in the triumphal procession at Rome,—or, perhaps, it may have been, out of real regard for his scientific genius and celebrity. He is said, even, to have bestowed some favors upon the philosopher's relatives out of respect to his memory. But Dr. Arnold well observes, that "the Roman soldier's sword dealt kindly with Archimedes, in cutting short his scanty term of remaining life, and saving him from beholding the misery of his country."

Little now remains of the ancient city of Syracuse, once so celebrated for her wealth and luxury and learning

* Lyell's *Second Visit to the United States*, chapter xI.

and art,—which was able, at different periods of her history, to contend against the whole power of Athens, of Carthage, and of Rome, and which, in its victory over the Athenian fleet, two hundred years before, had “settled the fate of the whole western world.” Not even a table to write upon, or a chair to sit upon, could be conveniently found there by a most agreeable tourist in 1770. Of its vast ruins, once covering a space of thirty miles in circumference, but a few imperfect fragments can now be traced. Its celebrated fountain of Arethusa, associated, in the mind of the scholar, with so much of the rich romance of ancient poetry, has become turbid and muddy, and is only resorted to as a place for washing the clothes of the poor. But the name of that wonderful mathematician and mechanic will make the place of his birth and the scene of his experiments and his exploits memorable throughout all ages and all lands,—even when the tyranny of Dionysius and the patriotism of Timoleon shall have been alike forgotten. The ever-burning *Ætna* itself, in whose awful presence he lived, and whose mighty energies he seems to have emulated in that memorable siege, may sooner cease to roll up its volumes of smoke and flame to the skies, than the name of *Archimedes*,—now that it has been transplanted to another hemisphere, and taken in special charge by the mechanics of a new world,—shall cease to be remembered and cherished.

What might not such a man have accomplished, had he enjoyed this new hemisphere, with all its boundless opportunities and advantages, as his scene of action! You all remember his striking exclamation—“Give me a place to stand upon, and I will move the world!” That was the expression of a man, who felt that his sphere was too limited for his powers, and who panted for a wider field upon which to display his genius. If he ever spoke with contempt of the practical arts, it

could only have been because he saw how little room for them there was in the narrow circuit to which his life and labors were confined. It required a world-wide theatre for the great mechanical inventions which characterize our age. It needed ocean navigation—it needed the navigation of vast inland seas and of rivers thousands of miles long, to afford the stage and the stimulus for the experiments and the enterprise which led to the invention of steamboats. It needed the magnificent distances of modern intercommunication, and especially of our own American Union, to give full scope for the Railroad and the Telegraph. Above all, it needed a state of society and of government in which industry should no longer be the badge of servitude,—in which it should no longer be thought inconsistent with the dignity of a philosopher to busy himself with the common affairs and common interests of life, and in which the laboring millions should be lifted up—let me rather say, should *lift themselves up*, as they have done—to the assertion and enjoyment of the common and equal rights of humanity,—it needed all this to give occasion and inducement to those wonderful improvements and inventions of every sort, of which the chief benefit and blessing has been manifested in improving the condition, and multiplying so incalculably the comforts, of the great masses of mankind. Necessity is the mother of invention, and there was little or no necessity of that sort in Syracuse. But everything for which a demand existed, Archimedes seemed able to supply, and actually did supply.

It was not reserved for him to find a place for doing more. It was not his destiny to discover the fulcrum, by poising his mighty lever upon which, the world, as he knew it, could be moved. But sixteen hundred years afterwards, at the head of the very gulf on which Sicily stands, and within but a few days' sail of Syracuse, the man was born, to whom that lofty destiny was vouch-

safed. Columbus, a native of Genoa, discovered the New World, and the Old World has been moving ever since. And it is not too much to say, that this motion has been in great measure produced by those very mechanical discoveries and inventions of which Archimedes was the original designer, and by that application of science to art of which he furnished the first signal and successful example.

I may not prolong this discourse by dwelling upon that long series of discoverers and inventors and men of science and mechanics, in the old world or in the new, by whom the practical and useful arts have been advanced to their present state of perfection. Our own land has had its full share of them. Their names are known to you by heart. Some of them have lived, some of them are yet living, in our midst.

But there is time enough still left to me, I am sure, to allude briefly to at least one of them, long since dead,—who, if wide distinctions and differences in his condition and pursuits, forbid me from calling him the American Archimedes, may well be compared with that wonderful man in the services which he rendered to art, to science and to his country,—and whose memory, at this moment, has at least one thing in common with that of the great Syracusan, which, I trust, for the honor of his native country, and his native city, will not be of much longer continuance.

If any of you, my friends, as you happen to be passing down Hanover street, in this good city of Boston, on some pleasant morning, will pause for a moment on the side-walk of the First Baptist Church, and cast your eyes over to the right hand side of the street, you will perceive, suspended from a sort of crane, smaller, but perhaps not altogether unlike those which Archimedes thrust out from the walls of Syracuse to swamp the Roman ships, and projecting from the building which forms the upper

corner of Hanover and Union streets,—a building in which may be found India Rubbers on the lower story and Daguerreotypes up stairs, (two articles which were utterly unknown to commerce or to art in the days to which I am about to allude)—you will perceive, I say,—a wooden ball, about as large as a good-sized cocoa nut or a small-sized water melon ; and upon this ball, from which a part of the gilding has been already cracked and from which the rest seems rapidly peeling, you may discern without difficulty the date of 1698, legibly inscribed on both sides of it. How this precise date came there, it is not easy to tell ; at least I have never met with the explanation.* But there is another inscription on the ball, and there are other well authenticated circumstances associated with it, which render it one of the most precious memorials,—which ought, certainly, to render it one of the most cherished relics,—of our city in the olden time.

There, in the year 1716, might have been seen a precocious and rather roguish boy, of about ten years of age, unwillingly but diligently employed in cutting wicks and filling moulds for the commoner sort of candles,—a humble occupation enough, but one not a little significant of the *light* which he was himself about to shed upon his country and upon mankind in after years. Born in Boston, on the 6th day of January, old style, or the 17th of January as we now call it, in the year 1706, in an old-fashioned gable-end house near the head of Milk street, opposite the Old South Church, in which he was christened the very same morning,—born in that well-remembered mansion, which, were it still standing, would be visited one of these days, if not now, with hardly less interest than that with which pilgrims from every land are found flocking to the humble birth-place of the great

* Perhaps, as Mr. Sparks suggests, the date only indicates the period when the Ball was made and adopted as a sign.

British bard at Stratford-upon-Avon,—the son of poor, but honest, industrious and pious parents, and having only been permitted to enjoy two years of schooling, one of them at the common grammar school of the town, and the other at a private school for writing and arithmetic, the little fellow had been taken away thus early from his books and his play, to help along his father in his business,—which was that of a tallow-chandler and soap-boiler. And that father's name may still be decyphered beneath the torn and tarnished gilding on the ball to which I have alluded. Tradition tells us that it was originally a blue ball, and that it was at one time the sign of a public house.

At the sign of the blue ball, that boy remained assisting his father for two years, and there was every appearance that he was destined for a tallow-chandler himself. But there was that in his nature, which could not be content with the daily drudgery of this somewhat unsavory calling. There was that within him, which seemed to whisper in his youthful ear, as Archimedes declared aloud in his maturer manhood, that if he could only find a place to stand upon, *he*, too, could move the world. And this dissatisfaction with his condition, at length manifested itself so distinctly and in so many ways, that his father had good cause to apprehend, that if a more agreeable and congenial occupation were not soon provided for him, he would break loose from parental control and go off to sea, as one of his brothers had done before him.

And so, he was next destined by his well-meaning parents for a cutler's trade, and his wits were to be employed in making edge-tools for others, in order to prevent him from doing what young America, I believe, sometimes calls '*cutting stick*' himself. But fortunately, perhaps, for all concerned, the fee demanded for an apprenticeship in that craft was too considerable for his father's purse, and the cutler's trade was never entered upon.

An occupation, which in its incidental opportunities and advantages, at least, was better suited to his peculiar taste and talents, at last offered itself; and he may now be seen regularly indented and bound over as a printer's apprentice till he should be twenty-one years of age, with what was doubtless deemed a most important and liberal stipulation in the covenant,—that for the last year of the term, he should be allowed journeyman's wages. No doubt he was the envy of all the young apprentices in his neighborhood, and considered as made for life, with such a rich remuneration in prospect. Under that indenture he remained steady and diligent for five years out of the nine which it covered,—working hard at the press during the day, and making the most of the leisure hours of the evening, and of the later hours of the night, too, in improving his handwriting, in practising composition, and in reading the books which accident brought within his reach,—and, fortunately for him and for us all, these were among the very best books which the world afforded—Plutarch, Bunyan, Defoe, and Addison.

But the yearning for a wider sphere could only be temporarily repressed by a condition like this, and indeed it was daily acquiring fresh impulse and increased energy from the very circumstances by which he was surrounded. The very last thing in the world for taming down a quick, earnest, inquiring and ambitious mind, conscious of its own power and its own superiority,—conscious, too, that its godlike capabilities were never meant to rust away unused,—the very last way in the world for reducing such a mind as this, into subjection to the discipline and drudgery of an indented apprenticeship, is to bring it into acquaintance and contact with that mighty mechanical engine, by which, more than by any other which has ever yet been known, either to ancient or to modern art, the old idea of Archimedes has been fulfilled and the world moved. If such a mind is to be kept under, let it

busy itself with any other mystery beneath the sun, rather than with the mystery of the composing stick, more especially when it is employed in the service of a newspaper. There is an atmosphere in a printer's office, which, some how or other, puts notions into boys' heads, and into men's heads, too,—an atmosphere which is very apt to make quick blood run quicker, and impulsive hearts beat higher, and active brains work harder, until those who were only indented to set up types for other people's thoughts, are suddenly found insisting on having other people to set up types for their own thoughts. So it has been, certainly, with more than one of your own most distinguished members, Mr. President,—your Russell, your Armstrong, and your Buckingham, the latter of whom has recently added a new claim to your regard, and to the regard of the community, by the preparation of an elaborate and excellent history of your Association.*

And so, certainly, it was with our young Boston printer's boy of 1718, whom not even journeyman's wages for the ninth year could tempt to serve out his time in mere type setting, and who even before the fifth year was fairly ended, availed himself of a tempting opportunity once more to assert his freedom, fled from his employer and family and native town, and who might have been seen, sometime in the year 1723, leaping ashore from on board of a little sloop at New York, a lad of only seventeen years old, without the least knowledge of any person in the place, and with very little money in his pocket. A few days afterwards he is found buying threepence worth of rolls out of a baker's shop in Philadelphia, and paying for them out of his last dollar, eating one of them himself from very hunger as he walked along Chestnut street, and washing it down with a draught of river water, giving the others to a poor woman and child whom he

* *Annals of the Massachusetts Charitable Mechanic Association*, by Joseph T. Buckingham, 1853.

had met along the road, and at last finding his way into a Quaker meeting-house, and there falling asleep from utter fatigue and exhaustion ;—a runaway apprentice, who might have been seized under the fugitive act, if such an act had existed in those days !

Thus ended the career of BENJAMIN FRANKLIN in his native city of Boston, and almost at that very moment, almost at that early age, and under those unpropitious and seemingly desperate circumstances, he commenced a career of well-nigh unequaled usefulness to his fellow men, and of well-nigh unequaled service and glory to his country. I am not about to attempt any detailed sketch of that brilliant career in the little remnant of an hour's discourse. It is so identified with the history of his country and of the whole civilized world in the age in which he lived, that volumes have been, and might again be, filled, without exhausting either its interest or its variety. Mr. Sparks has performed a service to the community, in his edition of Franklin's writings, with a biography prefixed, second only to that which he has rendered in the preparation of his noble edition of the life and writings of Washington. And I am glad to perceive that one of our younger literary men, lately connected with the evening press of the city, (Mr. Epes Sargent,) has brought the life and writings of Franklin within the reach of every one, in a single volume, just published, containing almost everything that could be desired by an ordinary reader.

I have only alluded to that career, this evening, as presenting some striking circumstances, both of comparison and of contrast, with that of the great Syracusan philosopher and mechanic of antiquity, whose history I have just given you, and from a feeling which impressed itself upon my mind, on the first glance at the design of the diploma to which I have alluded, that the figure of Franklin resting on that old original printing-press of his,

which is still to be seen in the patent office at Washington, might well have formed a counterpart to the figure of Archimedes resting on his screw. Their names are connected with periods of history two thousand years apart, but they are still, and they will ever be, the names, which mechanics everywhere, and certainly in our own country, will remember and cherish, with an interest and a respect, which no other names in that long, long interval, can ever be permitted to share.

If Archimedes signalized his early ingenuity in discovering the defectiveness of King Hiero's crown, Franklin was second to no one in detecting and making manifest the defectiveness and worthlessness of all crowns, for any purposes of American free government.

If Archimedes by his burning mirrors drew down fire from the sun upon the foes of his country, Franklin caught the forked lightning upon his magic points, averted it from the homes of his fellow-men, and conducted it where it might be safely disarmed of its deadly properties.

And, certainly, if Archimedes exhibited a sublime spectacle, in setting at defiance and holding at bay the whole power of imperial Rome on sea and on land, by his marvelous and tremendous enginery, literally laughing a siege to scorn,—Franklin, sending up his kite and holding his key in a thunder storm, in order to draw deliberately down upon himself the flaming bolts of heaven, that he might analyze their character and verify his theory for the good of mankind, presents a picture of even greater and nobler sublimity.

Franklin did not, indeed, devote himself to profound mathematical and geometrical problems and theorems. He lived in a larger and busier world than Archimedes ever conceived of, and at a period when the distractions of an unsettled and uncivilized state of society permitted but little devotion or attention to philosophy or science

of any sort. But he was not a whit behind the great Sicilian in the ingenuity and industry which he displayed, in devising and preparing the instruments and engines by which his countrymen were enabled to improve their condition in time of peace, and to defend their soil and their independence in time of war. And I know not any one in our own history, or in any other history, who, from the variety and multiplicity of the improvements, inventions, and practical suggestions, both for the purposes of peace and of war, of which he was the author, could so well be likened to that hundred-handed Briareus, to whom Marcellus compared the old philosopher of Sicily, as Benjamin Franklin.

Nothing seemed too lofty, nothing too low, for his regard. But the great aim of his mind, unlike that of Archimedes, was undoubtedly that which Lord Mahon in one of his late volumes ascribes to it;—"whether in science and study, or in politics and action, the great aim of his mind was ever *practical utility*,"—and nothing could be juster or finer than the remark of Sir Humphrey Davy, that Franklin sought rather to make philosophy a useful inmate and servant in the common habitations of man, than to preserve her merely as an object of admiration in temples and palaces.

It is amazing, as we skim over the surface of his career ever so lightly, to contemplate the number and variety of his services to his fellow-men in all stations and conditions of life, and to reflect how many of our most valued institutions and establishments, for the welfare alike of the individual and of the state, were of his original suggestion and introduction.

See him, as early as 1731, setting on foot at Philadelphia, the first subscription library on this Continent, at a time when one of the great obstacles to improvement was the difficulty of access to books.

See him, the year after, commencing the publication of

that earliest serial, *Poor Richard's Almanac*, which was to supply the place of so many other books for the spare minutes of the laboring poor, and filling it with maxims and proverbs which made it a fountain of wisdom for every fireside where it found a place, as, indeed, it has remained to this day.

See him, in the city of his adoption, undertaking the improvement of the city watch, projecting the establishment of the first engine company for the extinguishment of fires, and soon after submitting a plan for paving, and cleaning, and lighting the streets.

Follow him a little further, and see him proposing and establishing the first philosophical society on our Continent, and afterwards laying the foundations of an institution for education, which ultimately grew up into the University of Pennsylvania.

See him inventing, at one moment, a fireplace, at the next, a lightning-rod, and at the next, a musical instrument making melody which his wife, at least, mistook for the music of angels.

Behold him, in the meantime, presiding with consummate ability and despatch over the Post Office department of the whole American Colonies,—an office which, considering the inadequacy of the means of communication within his command, must have required a hundredfold more of the hundred-handed faculty, than even now, when its duties and distances have been so incalculably multiplied.

See him, in time of war, too, or in anticipation of war, exhibiting the same marvelous facility and many-sided genius in providing for every exigency and emergency which the perils of his country might involve. The first of those volunteer militia companies, which are still among the best securities for law and order in our crowded cities, the very first of them, I believe, ever instituted on this Continent, were instituted under the auspices of Franklin,

and he himself was the first colonel of the first volunteer regiment. The horses and wagons for the advance of General Braddock's army could never have been seasonably obtained, if ever obtained at all, but through his ingenious and indomitable energy, and through the pledge of his own personal credit;—and it is a most striking fact, that he warned that ill-starred commander (but warned him, alas! in vain) of the precise danger which awaited him; that fatal ambuscade of the Indians, by which he and his forces were so disastrously cut off on the banks of the Monongahela, and from which our own Washington escaped only as by the miraculous interposition of an Almighty arm,—escaped so narrowly, and under circumstances so hopeless, to all human sight, that no one to this day, can read the story of that imminent peril and that hair-breadth 'scape, without a holding of the breath, and an involuntary shudder, at the idea of what might have been the consequences to our country, if Washington had thus early been lost to her.

Follow Franklin across the ocean. Witness that early and extraordinary examination which he underwent at the bar of the British House of Commons in 1766, when he fairly exhausted the whole subject of the commerce, the arts, the agriculture, the whole circumstances and condition of the infant Colonies, and of the views and feelings and resolute intentions of the colonists,—literally astonishing the world with the information and wisdom of his answers, and furnishing in the almost off-hand replies to off-hand questions, a history, which must be consulted to this hour, for the best understanding of the times.

Go with him to the bar of the Privy Council, a few years later, and mark his imperturbable patience and equanimity under the reproaches and revilings of the insolent Wedderburn, calling him a thief to his face. Go with him, a twelvemonth afterwards, to the bar of

the House of Lords, and mark the same unmoved composure, when the peerless Chatham declares, in his own presence, that all Europe holds him in high estimation for his knowledge and wisdom, and ranks him with the Boyles and Newtons of old England.

Behold him at Court, the shrewd, sagacious and successful diplomatist, who, bringing his world-wide reputation as a philosopher, and his eminent character as a man, to the aid of his unequaled common sense and practical tact, did more than even Gates's army by their gallant and glorious victory at Saratoga, in bringing about that French Alliance and securing that French assistance, which finally turned the scale in favor of American Independence. Behold him signing that Treaty of Alliance and the Treaty of Amity and Commerce with France in 1778,—signing the provisional articles and the definitive Treaty of Independence and Peace with Great Britain in 1782 and 1783,—signing the Treaties of Amity and Commerce with Sweden and with Prussia in 1783 and 1785. Review the whole history of his successes as a minister, and his reception as a man, in so many foreign courts and by so many crowned heads, and then tell me if Solomon were not a prophet in regard to him, as well as in regard to Archimedes of old, in that memorable proverb, which Franklin himself tells us, in his admirable autobiography, that his father, among other instructions to him while a boy, so frequently repeated in his hearing ;—"Seest thou a man diligent in his calling,—he shall stand before kings, he shall not stand before mean men !"

See him, finally, and above all, as early as 1754, as a delegate to the Convention at Albany, proposing that plan of Union among the Colonies, which was ultimately to become the mightiest engine which mortal wisdom ever invented for maintaining the freedom, prosperity and independence of a nation like ours. Franklin was undoubtedly the original proposer of the Union as we now

enjoy it, and Mr. Bancroft has not hesitated to style him "the true father of the American Union."

His, indeed, was not the first plan of Union ever proposed on this Continent. The old primitive Union of the New England Colonies, more than a hundred years before, instituted under the auspices of John Winthrop, then Governor of Massachusetts, and his associates, and of whose little Congress he was the first President,—*that* was the original pattern and model of a political machinery, which has proved more effective than any combination of pulleys and ropes and wheels which Archimedes ever devised or ever dreamed of, for rescuing and defending our country at once from domestic and from foreign foes, and for propelling our Great Republic onward—ever onward—in her mighty, matchless career.

But Franklin knew little of our early Colonial history. He may have known something about William Penn's plan of Union in 1697, but not enough even of that to impair his claim as an original proposer of Union in 1754. And thus it is, that the little Boston boy, who filled candle-moulds under the Blue Ball at the corner of Union Street, must have the credit of having first set the golden ball of Union in motion. And few men, if any man, did more than he did, to keep that ball rolling on and on, until the Declaration of Independence in '76 and the Constitution of the United States in '89,—of both of which he was one of the signers and one of the framers,—attested successively and unmistakably, that it was a ball and a Revolution, which could never go backwards, nor ever stop short of a full and perfect consummation.

When this great and glorious consummation was finally accomplished, Franklin was already older by many years than Archimedes was at the siege of Syracuse, and his work of life was finished. Happier than the great Sicilian philosopher, however, he fell by no hostile hand, and with no spectacle of his country's captivity and ruin

before his eyes. He died, on the contrary, when he could not, in the course of nature, have expected or desired to live longer, at the age of 84, and in the confident assurance, which he expressed so characteristically while the Constitution of the United States was in process of being signed, that the sun of his country's glory was a rising and not a setting sun, and was about to usher in a day—a long continued day—of prosperity and true progress, such as the sun in the heavens had never before shone upon.

Brave, benevolent, wonderful old man! Well did our own Congress declare of him, in the resolutions adopted on his death, on motion of James Madison, that "his native genius was not more an ornament to human nature, than his various exertions of it have been precious, to science, to freedom, and to his country." Well, too, was it said by that matchless French orator, Mirabeau, in announcing the event to the National Assembly of France, which went into mourning on the occasion, that "antiquity would have raised altars to this mighty genius, who, to the advantage of mankind, compassing in his mind the heavens and the earth, was able to restrain alike thunderbolts and tyrants."

And if a eulogy of later date, long, long after the immediate impressions of his life and his loss had passed away, and when the time had arrived for a cool, deliberate and dispassionate judgment upon his abilities and his acts, his character and his whole career,—if such a eulogy be appealed to, as more worthy of reliance,—you may find it in the brief but glowing tribute to Franklin by Lord Brougham, in his late account of the statesmen of the times of George III., of which the opening paragraph will be more than enough for this occasion :

"One of the most remarkable men, certainly of our times, as a politician, (says he,) or of any age, as a philosopher, was Franklin ; who also stands alone in com-

binning together these two characters, the greatest that man can sustain,—and in this, that having borne the first part in enlarging science by one of the greatest discoveries ever made, he bore the second part in founding one of the greatest empires of the world.”

Undoubtedly, Mr. President, it is often a perplexing and a perilous thing to attempt, as Lord Brougham has here done, to assign the precise rank upon the scale of merit and of fame, to which any of the great lights and leaders of the world may be entitled. Our own country, certainly, has never yet been so unfruitful of such productions, that individual men could be at all times seen overtopping the level of those around them, and could be singled out at a glance as surpassing all their cotemporaries in the varied elements which enter into a just and true idea of human greatness. The North and the South, Virginia and New England, Kentucky, South Carolina, New York, New Hampshire and Massachusetts, have more than once in our history been found vying with each other for the palm, as having produced the greatest statesman or the best man. It is a generous rivalry, and, in some respects, a wholesome one, and we would not desire to see it altogether extinguished. Our own little city of Boston, too, though she has often shone, and been proud to shine, with borrowed rays,—rays which she would have rejoiced to hold back still longer from their kindred skies,—has herself given birth to more than one luminary of no common brilliancy. That city need not be ashamed to compare calendars with any of its neighbors, which, to say nothing of the living, has given birth in a single generation to a Quincy, a Bowdoin, a Knox, and a Samuel Adams.

But no one, I think, can hesitate, for a moment, to admit, that while there are others who may be permitted to compete with Franklin for the title of the Great American,—a title, which I am sure would, everywhere

and with one accord, be awarded, above all others and before all others, to the incomparable Washington,—that while others may be permitted to compete with Franklin for the title of the Great New Englander,—and I would not anticipate your judgment or the judgment of posterity upon such a point,—that while others may even be permitted to compete with Franklin for the title of the Great Son of Massachusetts,—there is no one, not one, who has ever yet been numbered among the native children of our own metropolis, who can be allowed to dispute his claim, for an instant, to the proud designation of *the Great Bostonian*. And if in the lapse of centuries, and in the providence of God, Boston shall ever become as Syracuse now is, her temples and her palaces prostrated in the dust, her fountains a place for the poor to wash clothes at, and her harbor for the fishermen to dry nets in, I am by no means sure that she will have any more effective claim, or any more certain hold, upon the memory and the respect of a remote and world-wide posterity, than that which Syracuse now has,—that within her walls was born and cradled and brought up to manhood the great Patriot Philosopher and Mechanic of his age.

And now, my friends, if some one of the renowned orators or philosophers of the old world, if some British or European Cicero,—a Brougham or a Macaulay, a Humboldt or a Guizot,—on coming over to visit this proud and prosperous Republic of ours,—should happen, as well he might, to take a Halifax steamer and arrive first at the birth-place of Franklin,—and if, upon being waited on by the magistrates of the city, as Cicero of old was waited upon on his arrival at ancient Syracuse, with an offer to show him our Yankee lions,—if such a man, under such circumstances, instead of asking to be conducted to our temples of education or of religion, of charity or of liberty, to our Asylums or Athenæums,

our aqueducts, our fountains, or our Faneuil Hall,—should inquire at once, as Cicero inquired, for the monument commemorative of the genius and services of one so known and honored throughout the world,—of him who wrested the sceptre from tyrants and the thunder-bolt from the skies,—I think it would not be difficult to realize something of the embarrassment with which His Honor the Mayor, or whoever else might be his conductor, would suggest to the distinguished stranger, that though Franklin was born in Boston, he did not exactly die in Boston,—that there was, indeed, a little painted stone urn, without a name on it, in one of the side streets,—but that Philadelphia, perhaps, would be the more appropriate place to inquire at, as he was understood to have been buried there.

Our distinguished visitor, of course, would acquiesce in the suggestion; not, however, I imagine, without a shrug of astonishment, which French politeness might conceal, but which John Bull, in the person of my Lord Brougham, certainly, would be altogether likely to make quite as manifest as was agreeable. At any rate, he would postpone further inquiries until he reached Philadelphia, where he would rely on the satisfaction of paying his homage at the very grave of the great philosopher. And now let us imagine him to have reached the charming metropolis of Pennsylvania, and to have sallied out, as Cicero did, into the ancient grave-yards in quest of the tomb,—What, what, would he find there,—if, indeed, he succeeded in finding anything? Let me give you the description in the very words in which I have recently met with it, in one of the leading religious papers of our land:

“A dilapidated dark slab of stone, at the south-west corner of Fifth and Arch Streets, Philadelphia, marks (or did mark a few years ago) the spot where rest the remains of Benjamin and Deborah Franklin; but you

cannot see their grave nor read the inscription without climbing a high brick wall, in violation of the law, or without securing a good opportunity and the favor of the sexton, each of which is said to be attended with difficulty. So well hidden is this grave, and so little frequented, that we have known many native Philadelphians of men's and women's estate, who could not direct one to the locality where it may be found."

Is this, Mr. President, a mere parody of Cicero's description of his hunt for the tomb of Archimedes before the Christian era?—Or is it a genuine and authentic account of the tomb of Benjamin Franklin in this nineteenth century? If it be the latter, as, I am sorry to say, cannot be doubted,—said I not rightly and justly, a moment since, that there was at least one thing in common to the memory of the great Syracusan and the great Bostonian, which, I trusted, for the honor of us all, would not be of much longer continuance? Archimedes had been dead a hundred and thirty-six years, before Cicero discovered his forgotten tombstone buried up beneath briars and brambles. Less than half that time has elapsed since Franklin was summoned to the skies. He died only five years before this Association was founded, and, thanks to a kind Providence, not even all your original members are yet numbered among the dead. There is at least one of them,* I rejoice to remember, who may be seen almost every day on 'Change, with a heart as young as the youngest within these walls, and whose name, inscribed in the second volume of Webster's Speeches, as a token of the constant friendship and regard of their illustrious author, will be preserved as fresh and fragrant with future generations, as it is with that which has been the immediate witness of his genial good nature, his fullness of information, and his untiring obligingness. Sixty-three years only,—less,

* Isaac P. Davis, Esq.

by seven, than the allotted term of a single human life, have thus expired since Franklin's death,—but they have been enough, it seems, to consign his tomb to dilapidation and almost to oblivion.

It is true, indeed, and in justice to Franklin himself, I must not forget it or omit it, that with a native simplicity and modesty of character, which no compliments or caresses of the great or the learned, which no distinction or flattery at home or abroad, could ever corrupt or impair, this truly great man prescribed, by his own Will, the plainest and humblest possible memorial for his own resting-place.

“I wish (says he) to be buried by the side of my wife, if it may be, and that a marble stone, to be made by Chambers, six feet long and four feet wide, plain, with only a small moulding round the upper edge, and this inscription :

‘BENJAMIN AND DEBORAH FRANKLIN,
178—,’

to be placed over us both.”

It is true, also, that Franklin has left memorials enough of himself behind him, to render all further commemoration on his own account altogether superfluous.

Every lightning-rod is a monument to Franklin, of his own erection ; and not a flash, which is disarmed by its magic points, passes to the ground, without a fresh illumination of his title to the gratitude of mankind. One might almost be permitted to borrow the idea of the conscience-stricken king in Shakspeare's *Tempest*, and to imagine the thunder, with its deep and dreadful diapason, pronouncing the name of *Franklin*,—not, indeed, as a name of terror, but as a pledge of safety in the storm.

Every penny-stamp, too, is a monument to Franklin, earned, if not established by himself, as the fruit of his early labors and his signal success in the organization of

our infant post office ;—and no man, I think, can use the invaluable little implements of modern cheap postage,—I do not mean the stamped envelopes, which are nothing less than a disgrace to American art and a caricature of the Father of his country, but the original, separate stamps,—without rejoicing that, apart from all other advantages of the system, the noble heads of Washington and Franklin are thus brought daily to our view, and are associated in the minds and hearts of the whole people of the Union, with the unspeakable privilege of a sure and speedy communication with the absent and the loved.

And here, in our own midst, too, I may add, every little silver medal distributed annually to the children of our free schools, is a precious memorial of Franklin ; and every boy or girl who is incited by the prizes he instituted to higher efforts at distinction in good scholarship and good behavior, is a living monument to his prudent and provident consideration for the youth of his native city. One of the last things which a Boston boy ever forgets is, that he won and wore a Franklin medal. There is at least one of them, I know, who would not exchange the remembrance of that youthful distinction, for any honor which he has since enjoyed.

And though the larger provision which he made for the young and needy mechanics of our city has not quite realized all the advantages which he anticipated, yet the day is sure to arrive, when Boston and the whole Commonwealth will reap a rich harvest of public improvement from the surplus accumulation of the Franklin Mechanic Fund.

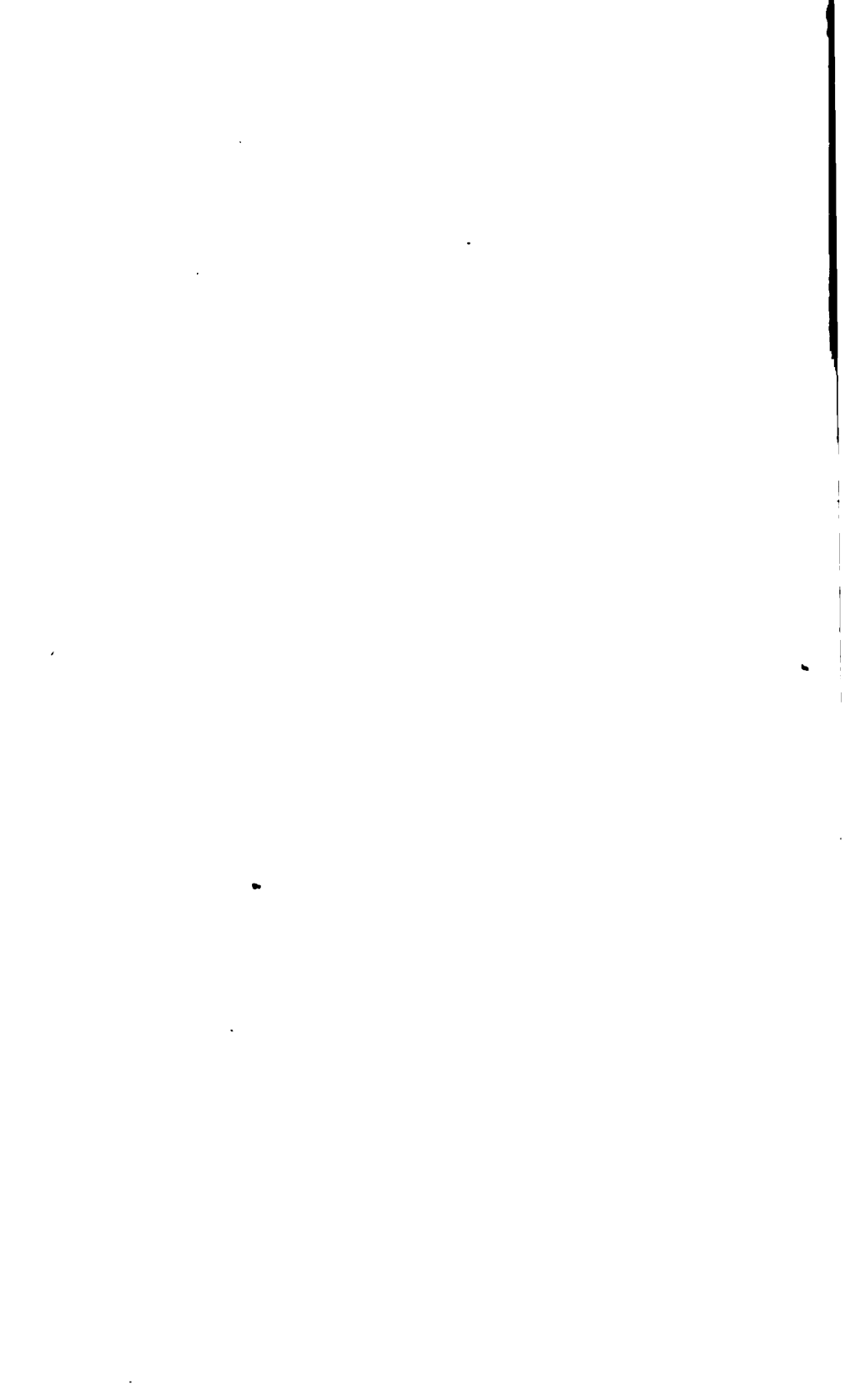
Not, then, because Franklin is in any danger of being forgotten,—not because his memory requires the aid of bronze or marble to rescue it from oblivion,—not because it is in the power of any of us to increase or extend his pervading and enduring fame,—but because, in these days of commemoration, it is unjust to ourselves, unjust

to our own reputation for a discriminating estimate and a generous appreciation of real genius, of true greatness, and of devoted public service,—do I conclude this Lecture with the expression of an earnest hope, that the day may soon come, when it shall cease to be in the power of any one to say, that the great Patriot Mechanic and Philosopher of modern times is without a statue or a monument, either in the city of his burial-place or his birth-place.

The mechanics of Massachusetts, the mechanics of New England, owe it to themselves to see to it, that this reproach no longer rests upon our community and our country. And I know not under what other auspices than theirs, such a work could be so fitly and so hopefully undertaken. When the obelisk at Bunker Hill,—doubly consecrated to us by the memory of those in whose honor it was erected, and of him whose consummate eloquence will be forever associated both with its corner-stone and its cap-stone,—when this noble monument was lingering in its slow ascent, the mechanics of Massachusetts pronounced the word, Let it be finished—and it was finished. And now there is another word for them to speak, and it will be done. Let them unite, let us all unite, with our brethren of Philadelphia and of the whole Union, in erecting a suitable monument near the grave of Franklin ;—but let there not fail to be, also, a Statue of our own, on some appropriate spot of the Old Peninsula which gave him birth.

I know not of a greater encouragement which could be given to the cause of Science applied to Art, in which we are assembled ; I know not of a greater encouragement which could be held out to the young apprentices, to whom we look to carry forward that cause in the future, and to supply the places of that noble race of Massachusetts mechanics to which our City, our State, and our whole Country, have been so greatly indebted,

both for laying the foundations, and for building up the superstructure, not merely of our material edifices, but of our moral, civil and political institutions ; I know not of a greater encouragement which could be afforded to industry, temperance, moderation, frugality, benevolence, self-denial, self-devotion, and patriotism, in every art, occupation and condition of life,—than the visible presence, in some conspicuous quarter of our metropolis, of the venerable figure of Franklin, in that plain, old-fashioned, long-bodied, Quaker-like, coat, with which he will be forever associated in our minds, and in which he appeared proudly alike before kings and commoners ; and with that bland and benevolent countenance, which seems to say even to the humblest and least hopeful of God's creatures —“ I was once as you are now,—houseless and penniless, without fortune and without friends,—but never despair,—be just and fear not,—be sober, be diligent, be frugal, be faithful, love man and love God, and do your whole duty to yourself, to your neighbor, and to your country, in whatever circumstances you are placed,—and you, also, may do good in your day and generation,—and you, too, may, haply, leave a name, that shall be remembered and honored in all ages and throughout all climes ! ”



HANDS: BRAIN: HEART. // -

AN

THE NEW YORK
PUBLIC LIBRARY

P 37063

ASTOR, LENOX AND
TILDEN FOUNDATIONS
1898.

ADDRESS

DELIVERED BEFORE THE

Mass. Charitable Mechanic Association

ON OCCASION OF THEIR

EIGHTH EXHIBITION,

SEPTEMBER 24, 1856.

BY REV. F. D. HUNTINGTON, D. D.

☆ MASS. HIST. SOC.

BOSTON:

PRESS OF GEO. C. RAND & AVERY,
NO. 3 CORNHILL.

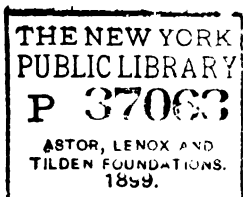
1856.



HANDS: BRAIN: HEART.

A N

ADDRESS



DELIVERED BEFORE THE

Mass. Charitable Mechanic Association

ON OCCASION OF THEIR

EIGHTH EXHIBITION,

SEPTEMBER 24, 1856.

BY REV. F. D. HUNTINGTON, D. D.

BOSTON:

PRESS OF GEO. C. RAND & AVERY,
NO. 8 CORNHILL.

1856. R AH

MANAGERS' OFFICE, FANEUIL HALL,
BOSTON, SEPT. 27, 1856. }

TO PROFESSOR F. D. HUNTINGTON, D. D.

Dear Sir: — In compliance with a vote of the Board of Managers of the Eighth Exhibition of Manufactures and Mechanic Arts, under the auspices of the Massachusetts Charitable Mechanic Association, it is our pleasant duty to communicate to you the thanks of the Board for the interesting and eloquent address delivered before the Association, on the 24th inst., and to request a copy of the same for publication.

Truly yours, &c.

FREDERIC W. LINCOLN, JR. }
JOSEPH M. WIGHTMAN, } *Committee.*
OSMYN BREWSTER, }

CAMBRIDGE, OCT. 20, 1856.

TO MESSRS. F. W. LINCOLN, JR., }
JOSEPH M. WIGHTMAN, } *Committee.*
OSMYN BREWSTER, }

Dear Sirs: — I thank you and your esteemed associates for the kind reception granted to my address. It was a pleasure to me to be brought, in this way, into direct communication with your very honorable and useful institution. My interest in its prosperity will always continue.

With most sincere regard,

Your friend and servant,

F. D. HUNTINGTON.

ADDRESS.

HANDS, Brain, Heart; the three parts of a complete mechanic and a true man; the three grand seats of personal power; the organs of the three supreme human forces: their functions, their relations, their harmony; this is the natural subject.

Why do you gather here, at the close of another successful celebration of particular labors, for an hour of general thought? Why is the celebration itself? There can be but one answer. We call it an Exhibition. But that name does not describe the thing. It is more. It is an educator. The whole scene is a vital, earnest institute of instruction. It is an argument. It is a treatise. It is a poem. It is an illustrated text-book. It is one of the people's quick-witted, extemporized, unencumbered universities. The announcement that went out, two weeks ago, to all the shops and mills, as far as the Ammonusock, the St. John's, the Hudson, and beyond, that the Eighth Exhibition was open, was a school bell, calling every artizan in New England, to come and take a new and larger lesson. Your mechanism does not parade in Faneuil Hall to get itself admired, and flattered, and so to advertise the dealer's stock. It comes on a nobler errand; comes to quicken invention, to stimulate drudgery, to re-inspire routine, to put new illumination into old task-work, to raise the tone of life, to expand civilization, to

finish and edify society. When the first Industrial Exposition was held in Boston, one hundred and three years ago, and three hundred manufacturers made the Common yonder buzz with three hundred spinning-wheels, the relative excitement and curiosity may have been as great as now. But was there as much relative tuition, as much impulsive energy? Amidst these gorgeous Fairs the unceasing problem is, that we have human specimens to send, as imposing, in proportion, as the coaches, and churns, and reapers; that the ratio be kept right between the labor and the laborer; the artificer greater than the splendid fabric he finishes, the engineer superior to the engine, the operative of more significance than the loom, the woman finer than the embroidery; and so to save the workman from sinking into a belittled and skulking subaltern in the glittering show-house he has adorned. To get the right kind of mechanism you must, first of all, get the right kind of a mechanic. You are perpetually interrupted and turned back from the premium and the product to the producer, whom no premium can pay. That may still happen which an old chronicler complains of. "In times past," he says, "men were content to dwell in houses builded of sallow, willow, plum-tree, or elm; but now these are rejected, and nothing but oak any whit regarded. And yet, see the change; for when our houses were builded of willow then had we oaken men; but now that our houses are made of oak, our men are not only become willow, but even, through a Persian delicacy crept in among us, altogether of straw, which is a sore alteration." This, then, is the question. Going from the article to the worker, how to do the most for him, the mechanician, in these three chief elements of his strength—his Hand, his Brain, his Heart.

I. Brain and Heart are separate centres of vital systems; co-ordinate economies of the corporeal estate; each an inde-

pendent organism, with its apparatus and offices; each carrying on its cunning processes; each originating its own complex motions, and maintaining its self-included government; yet both co-operating in a concord of perfect beauty in the Commonwealth of the body. The hand is their common agent — their steward, secretary, marshal, factor, finisher.

Yet, when we look at it mechanically, the hand seems hardly less the seat of an organic system in itself. That, also, is a centralized economy. It is the consummation of a complicated order. For the hand properly begins at the roots of life. It is articulated from the clavicle of the chest. It finds, at the scapula, the nexus of muscles and nerves which bind it back and fasten it vascularily to the brain. So it grows out of the midst of the man, and swings by the efficiency of his imperial will.

Every bone and fibre, from the shoulder-socket on, is tributary to the hand; contemplates it, prophesies it, works it. And when we come to the structure itself, with its frame-work of twenty-nine bones, its hinges and pulleys, its grooves and cords, its levers and screws of unequal lengths, its telegraph and tubes, its solids and liquids, its cushions and painted coverings, we find it the marvellous medium of man's physical commerce with the world.

Here, then, is the point of contact between our human organization and all the mechanisms of science and art. This is the material joint or shackle, where the forces of machinery and of man meet and interlock. The primal and archetypal tool is the human hand; for complexity, for flexibility, for adaptation, for strength, for endurance, for delicacy, for noiseless play, unrivalled and inimitable. It pulls, and grasps, and drags, and picks, and smoothes, and punches, and lifts, and presses, and rubs, and pushes, and wrenches, and tears, and tickles, and folds, and stitches, and buttons, and kneads, and delves, and

scatters, and smites. Will any other tool do so much? Yet, with all this pre-eminence in the aggregate of its qualities, it is limited in respect of them taken one by one. As necessities multiply, man wants more hands, and tougher, and stouter, and longer, than the two that Nature gave him. Mechanism is the effort of this want to supply itself. Mechanism is an extension of the human hand. It is the primitive tool carried out into new sets of links, wheels, cylinders, pivots. Every grist-mill, from that of King Mithridates of Cappadocia, to that of Oliver Evans of Delaware, the threshing machine, the power loom, Archimedes' cranes and Hoe's presses, are only inanimate accessions taken on to our natural constitution, to help out its deficiencies. Cotton cloth was once principally manufactured by the East Indians. But to-day a single hand in Lowell can spin as much cotton in one hour as three thousand Hindoo hands. It is known that the machinery now running in Great Britain can make more cloth in a given time than all the unaided hands of the whole population of the globe without machinery. It took one hundred thousand pairs of Egyptian hands twenty years to erect the great pyramid. One third as many, aided by the steam power now running in England, would raise the same materials to the same height in eighteen hours. In order to achieve these helping offices with the finest effect, mechanism must imitate those special characters, such as compactness, facility, accuracy, adaptedness, compensations between force and velocity, which give the hand its instrumental perfection, and, indeed, make it, in some sense, the divine model for all mechanics. The Indian muslins prove that there is a touch of the Hindoo woman's fingers finer than any possible machine. If you uncover a piano-forte, you find the light unequal levers, from the key-board, traversing the sounding strings, just as the delicate muscles do which yield their quickness to the musician's

fingers, which are named, in anatomy, from that very office, the *fidicinales* of the instrument. The machine that picks has its thumb and finger; the machine that twirls, its wrist.

So, too, a machine that violates any of these manual laws, having too much bulk, or complication, or cost of material to do its own individual work in the best way, at the least cost, is overdone; and it becomes a mechanical rule that excess of elaboration is clumsiness. It is as if the Creator had put fifteen fingers on to each hand. To hit the exact proportion between the tool and the use, is the inventor's problem. The Patent Office at Washington abounds in specimens of these over-wrought designs—contrivances too subtle for convenience—the crude exaggerations of a science exulting in its resources, but not yet ripened into the maturity that likes “too much” no better than “too little,” and fits the weapon precisely to the use.

It will be found, too, that the Hand can never be entirely displaced. Things will remain to be done by it that nothing else can do. Hence the need, not only of a sentimental recognition of its dignity, but of a muscular practice in its discipline. Christianity and republicanism together have not yet thoroughly killed out the old fallacy about manual labor, and the false shame of a brown skin. In the broad philosophy which is yet to interpret our life, every faculty and limb will be seen to be ennobled by service. The effeminacy of the Chinese aristocracy, who take pride in letting their nails grow as long as their fingers, as a proof that they never work, creeps into all the nations, and taints them with its pale stupidity. When common sense begins to re-adjust the scale of honors, it will have only to recur to the simple truth just laid down, and to see that the training of the original and most perfect instrument, fastened to our own side, can never be less legitimate or noble than the training of tools which are its copies and assistants. It is

good, amidst the fashionable fastidiousness and daintiness of our modern customs, when so many nice young men dodge behind a dry goods counter, or into the dull decencies of a profession, only to get rid of laying their bones to toil, to let some masculine calling stand forth as a witness of the wholesome law that by the literal sweat of the brow the best of men shall eat their bread; that sweat which moistens the cement that binds the social welfare together. Among all the new clans and lodges, let us be content so long as there is no order of Do-nothings. The time will be when the regular idler, consuming and not producing, shall be felt to be such an insufferable outrage and excrescence on society, that he shall be compelled to make instant apology, at the whipping-post of public opinion, for the presumption of occupying a human organization. You see this change coming about. I look upon it as one of the grand reforms inaugurated by Christian ideas, evidenced and furthered by nothing more signally than by your own public jubilees of handiwork, your royal ovations of industry, your coronations of the genius of labor. You see it also by the politic flatteries which any lazy demagogue, who has objects to carry, in these days, finds it expedient to bestow on what he patronizingly calls "the working classes." Certain talkative gentlemen, following in the wake of Carlyle's reverberating remonstrance, like "flutes and soft recorders" after a roll of indignant thunder, have piped and sung to the age of the "Dignity of labor," "Godlike labor, with the grimed brow and the tough hand," till the "noble army" of laborers, canonized into equal honors with the "noble army of martyrs," but for some intrinsic valor of their own, might have subsided into the complacent and comfortable persuasion that nothing was left for them to do but to vote the party-ticket, be dined the day after election, and lounge on ottomans, and be sprinkled with rose-water, the rest

of life. Now, it seems to me the true way to honor labor and laborers is to put an honest faith first in their capabilities, and then call them to be true to their own order, in their own line. To provoke them, and keep them uneasy, till they have stretched their sinews to more various achievements, is the manliest way to eulogize them. Work will always be the business of the hero or the saint, and a blessing, while God lives, who worketh hitherto; and no device is friendly to the race which brings either a compulsory or a luxurious sloth.

Just at this point crops out one of those solemn social questions, so much more easily settled in the theories of political economists than in the anxieties of hungry families. It is suggested afresh, in some form, by every display like that in yonder halls. Hands and machines come to competition. The contrivance that does the work of a hundred hands threatens to leave the hands idle, and the mouths that match them empty. No general reasoning, no grim logic of "Help yourself if you can," no past experiment, quite suffices to allay this alarm of the people. Combining with natural prejudice and the pride of a self-sufficient conservatism, it disturbs many minds, and does retard, in some places, even the impetuosity of nineteenth century invention. I can myself recall the scene,—indeed, it was less than ten years ago, where, in one of the most intelligent agricultural districts of New England, the neighbors of the venturesome farmer who first bought a horse-rake refused to be convinced by the plainest proofs of its economy, but looked askance at it over the fences as an impertinent piece of agricultural heresy, almost as bad as if the good old parson had shortened his sermon below the regular hour and a quarter, giving them less than the worth of their money in the pew-tax. The old spirit is by no means dead—however effectually you, gentlemen, may be aggressing upon it—which has persecuted the

prophets, and ridiculed the thinkers, and starved the innovators; which, in the old world, has often collected a rabble to mob a new discovery that came with healing on its wings; which forbade Watt to open his instrument shop in Glasgow; which compelled the House of Representatives of the United States, in 1810, to refuse Robert Fulton the use of their Hall to deliver a lecture on steam navigation, on the ground that it was "a visionary scheme;" which sneered at "Fulton's Folly," as it was nicknamed, in Brown's shipyard, at New York; which actually broke the heart of poor William Lee, in the time of James I., driving him, by English indifference, to France, and then, by French bigotry, from Rouen to Paris, where he died in misery, because the world would not let its stockings be made by his stocking-machine; which, in South America, according to Humboldt, instigated the citizens to petition the government against the building of a road among the Andes, lest it should damage the interests of the carriers, who had enjoyed the monopoly of carrying travellers across the mountains in baskets strapped on their backs; which influenced the Swiss peasants, when they saw Rupp constructing the superb slide of Alpnach, for bringing down the pine timber of Mount Pilatus into Lake Lucerne, to accuse his trigonometry of being the inspiration of the devil; which drove the lace manufactory and prosperity out of Nottinghamshire into Devonshire; which, only forty years ago, threw brickbats at a collier in Philadelphia who brought down nine wagon loads of mountain coal to sell, hooting after him as an impostor, that pretended to sell stones for fuel; which trembled all the way from Boston to Albany, when the Western Railroad was about to be laid, with the ludicrous fear that horses would go out of fashion, and have to be shot down in their shoes as a drug; which fretted the Flemish gentleman, who began with commiserating American ignorance, but, after hearing from his

American fellow-traveller a description of Amos Whittemore's card-machine and Thomas Blanchard's lathe, pronounced them impossible, grew angry, and took to sulks, at the impudence of the Yankee who undertook to put off upon him these stories of Gulliver inventions; which drove Hargreaves out of Lancashire for his life, and prompted Laurence Earnshaw to break up his own machine, in a fit of benevolent apprehension, lest he should take bread out of his neighbors' mouths, — when a bold improvement on both their designs by Arkwright gave wages and food to millions of workmen, raised the commerce in cotton from two million pounds a year to a thousand millions of pounds, and poured wealth into the treasury of the nation and the world.

That timid temper, I say, is not exterminated yet; and, therefore, it is one of the beneficent ends of your enterprize to come in as a vindicator and interpreter, in this insane insurrection of Hands against machines; to justify all manner of intellectual originality; to demonstrate the absolute justice of the industrial laws. It is yours to prove that the multiplying of labor-saving machinery can never diminish the means of living; in fact, that labor is not finally saved, but multiplies itself, by and in the machine. The final cause of labor-saving contrivances is to increase labor. This is the eternal paradox of the world's growing civilization. A mechanic is not worthy of his name, who prizes any such piece of workmanship because it releases him from action, or relaxes the necessity of his doing; he will prize it precisely as bringing a means, and a stimulus, and time, for doing more than ever. The several industries of mankind move forward under one harmonious plan. Every legitimate development or production in one favors the others. I know of nothing in the whole history of men more beautiful or more majestic than the certainty of this rule. The illustrations of it are the annals of all the arts. Apart from its own

fascinating interest, it is one of the most splendid proofs of the being and providence of God. It is a more convincing argument for religion than often gets voice from a pulpit. The family of man are under one Father. It is as sure as gravitation, that every fresh mechanism He puts into the world through an ingenious mind, He takes up and makes a part of his unimpeachable goodness. Its inconveniences are local and temporary; its beneficence is cosmopolitan and permanent. It enriches, employs, establishes, equalizes. It creates demands only to satisfy them; it saves expenditure only to scatter it with a wider sweep. A few copyists are, at first, sent adrift by the printing-press; but what an army of fainting operatives that mighty engine nourishes to-day! a stupendous philanthropist of employment, if that were its only function! The sewing-machine may bring a brief embarrassment to the poor sempstress; let thoughtful charity consider it, and soften the transition; but, in the end, she also will be the stronger and better for it, if she only keeps her own mind up with the times. If she sits sullenly down, and complains, or persists in making her fingers competitors of wheels and spindles, she will be crushed. There is less stitching to be done, that her faculties may be liberated for larger enterprizes, and her hands find a more exalted ministry. It is futile to be jealous of the laws of progression. Let us rather make them friends by conforming to them, and get them to back us up, by standing on their side. We must all go where the Almighty points, and not ask to have the orbs of celestial light stand still for our private accommodation. We must be hospitable and brave in our welcome of the new future, as well as thankful venerated of the old past.

So far, then, we have the place and office of the Hand. It has a school, a discipline and a dignity of its own. It is reconciled with all the mastery that man's best wits can wield. Its

skill, in any performance, shares the honors of the Brain. The handler is all; the things handled are alike. The wise handler of a hammer, trowel, axe, is as good as he that handles pen, or pencil, or lancet. The pitiful boaster of a pedigree of blood or titles — an ancestry that drove equipages rather than business, swung a dice-box instead of a sledge, and wore clothes as their vocation, finds his level. The Hand itself rises to the rank of a Reformer. It republicanizes the race. It directs toil by thought. It glorifies its muscles with the crowning mind. It points up, and declares that a man's head belongs just where Nature put it — on the top of his backbone!

II. Up, then, from Hands to Head. The hands administer; the head legislates. The hands perform; the head organizes. The hands execute; but it is the head still that originates, or invents. Anaxagoras was only half right; it is not the hand itself that constitutes man's superiority over other animals; but the hand as thought inspires it. The coming in of a new tide of intellectual life is always an epoch in the mechanics' profession; none feel it sooner than they. It exalts their whole estate, if they only welcome it, and raises them to a level with emperors. When Boulton, the engineer, partner of Watt, stood in the presence of George III., to open to him the mystery of the steam engine, and the king asked him, as he might a peddler, "What do you sell, sir?" Boulton replied, "What kings, sire, are all fond of — *power*." Worthy to be placed beside that was the heroic reply of the ingenious potter, Bernard Palissy, to the French monarch, after the massacre of St. Bartholomew. Charles IX. came to him in the Bastile, and told him if he did not give up his Protestant heresy he should be forced to surrender him to the persecutors. "Forced!" said the valiant Palissy, "they who force you cannot force me; I can die! Your whole people have not the power to compel a simple potter to bend his knee!"

The Saxons, it has been said, are the hands of mankind. But they are more than that. No hands ever smote, and grasped, and split, and builded, like theirs, that did not reach back, in their sinewy planting, to the top of the man, and get their motor forces straight from the imperial mandate there.

Now, to the realization of those results which science is in these days so liberally offering to industry, there must be a compliance with conditions — conditions requiring an earnest intellectual purpose in the individual, or else he fails of any but a very superficial advantage from the common excitement. The first of these is so simple a one as a division of time, and the consecration of hours to the Brain's private business. The notion that a man can get all the knowledge he needs for his business while his hands are busy at its details, is fatal to liberal achievements. That sluggish maxim never crowded your galleries with those trophies of triumphant wrestling-matches with Nature. Every species of work, that deserves to be done at all, deserves to be nurtured and enlivened from a higher fountain of inspiration than itself. Our capital-stock of ideas has to be replenished from another source than that where we keep our small coin in circulation. There must be a mine and a mint as well as a pocket purse and paying teller. Above the noisy streams of our outward activity are the cool head-waters of dispassionate thinking. However homely the drudgery of the employment, it has grandeur in it whenever it is followed by a workman who feels, at his daily return to it, that he steps forth out of a solitude where his intellect has been put to some strain. The common current of his transactions may look shallow or common-place; but it really borrows romance and sublimity from those heights of study whence his soul comes down into its round of commerce with the world. No great start forward was ever given to any practical art, except through

minds that kindled with this passion for knowing ; minds possessed by the love of knowledge for its own sake ; by the afflatus of a searching, inquisitive spirit ; by loyalty to the idea of a perfect life ; and all this taking form in systematic studies. One will not insist on the scientific avarice of the old scholar Buddæus, who said, at some expense of gallantry, that the only day he had utterly lost was the day he was married, because that day he "did only manage to get six hours for reading." But one can afford to let no ordinary and extra-matrimonial day dodge by him, without depositing in the hand of his persistent curiosity some piece of imperishable wisdom. It is yet to be popularly understood that the secret of recreation, after fatigue, is not idleness, but change of attention. After nearly all employments where the manual and observing faculties predominate, as in most mechanical and trafficking vocations, refreshment is reached by a fresh turn of thought far more effectually than by vacuity. When your mind needs rest, it does not need that you should empty yourself of your mind, and retire into a state of temporary brutism, or idiocy. If you need sleep, sleep outright. But this dozy, dreamy, soggy inertia, that stupefies so many busy men's evenings, dividing them with gossip and bad company, is not for the health of any part of us.

I allude to points so plain, gentlemen, out of a sincere sympathy, if I may not say loyalty, toward your vocation, as the masters of industry and machinery. You represent, nay, you are the men that are to manage the hands of the nation and the age. Whatever certain hereditary prejudices or prerogatives might prefer, men of your order, before this century is done, are to rise into more commanding posts than they have taken yet. The men of whom Franklin the type-setter was himself the type are not only to stand *before* kings, as he did, but *in the place* of kings. They are to sit on those thrones, Baconian and New-

tonian and Fultonian, of which nature is the foundation, and knowledge is the power. Daniel Webster said once, speaking of this very Society, Mechanics are the men that teach us how a little country is to be made a great one. But to that end, and in order that the power may not be reckless and demoniacal—the more of it the more mischief—these Hands must be guided and poised by wise and seeing heads. As I walk through your avenues of manufactures, and pause in section after section of exquisite and almost bewildering artizanship, this is the thought that ever recurs and haunts me: where are the thousands of mechanics that are not here, and have no share in this exhilarating competition? How to gain them over from their contented humdrum, and join them to this progressive company! For, remember, it is just as important that the many should be brought up with the few, as that the few should go on; and if you would find the one dividing line which separates the inventor and exhibitor from the plodding dullard, you must look for it in just that simple spot—that hour of solitary study, and of hard thinking, beyond the necessary circuit of the trade. The one is satisfied if he does to-day what he did yesterday, and as well. The other goes up, often, with prophetic aspiration, into a loftier atmosphere than that, and comes finally to lift his whole work with him, and live with the Olympian band.

And so, I say further, there must not only be set seasons of mental exercise, but there must be a determination to bring out the intellectual element that lies latent in every trade, and to know, of every piece of work, every thing that is to be known about it.

There are two ways of doing any business, from building empires to making pins. One is to succumb to the outward necessities of the task; to grind on as before, and get a living; to be dragged, with reluctant and abject moods, through the

wonted motions, with no elastic spring, no illumination, putting no mind into them. It is the testimony of the best practical observers among mechanics, I find, that familiarity with the details of any craft does not, by any means, dispose men to a study of its principles; but rather the contrary. And this is just what was to be expected; for it is so of every vocation under the sun. You will find in them all the plodder, the dunce, and the slave, on the one side; the vital, thinking, riddle-solving, discovering master, on the other. There are doctors that bleed and dose as mechanically as the sewing machine punches the stitches in the pillow-case. There are engineers as automatic as their engines. There are schoolmasters as regular, and hard, and smooth, and dry, as their ferules. There are preachers, — clerical grinders at the pulpit, — with whom, when the text lifts the gate, the mill-wheel begins sermon-wise to go. Those that fall under this torpid monotony miss the whole charm that God has woven about every honest pursuit. They go round and round, in the old servile track, with want for their overseer, custom for their cheerless cabin, and hunger and crying children for the whip and gong of the plantation. The deadening paralysis of repetition strikes in among their most thrilling concerns, dimming their splendor and spoiling their fascination.

The other way is to bring into every-day service so much mental activity, so much curiosity as to all the methods and mysteries of that kind of work, from the origin of the raw material up to the last result and highest finish of the product, that the workman may be said to hold his work under him while he does it, and maintain an honorable mastery over his trade. Master-workman, in this sense, which is the true sense, every workman can be — here, at least, in New England, where there is a schoolhouse in every district, and a library not far

off. Spiritual things apart, this is the foremost of all distinctions. Republicans ought to know of no other nobility. To be intellectually the commandant of one's place and calling, wheresoever — on ship's deck or at a factory-forge, in the cabinet of a nation's administration, or in the shop that makes cabinets for the people that make the administration — that is to belong to the senatorial order of men. This harnessing the whole intellect to the common business is blood and titles, stars and garters, sceptres and crowns. It is this that converts the job-mason, laying brick upon brick, into the artistic designer, that carries cathedrals in his brain. It is this that makes the difference to-day between the beggarly Mexican, scooping up precious minerals and metals by the shovel-full, and the affluent Yankee, digging through rock and ice, and all the tough resistances of the earth. It is this that turned all Boston, a week ago, into a pageant of grateful memorial for the boy that began with cutting the candle-wicks in his father's chandlery, and ended with laying the capstone of the temple of a nation's freedom, and electrifying every interest and every home in civilized lands with harmless fire from the skies. It is this that has borne on the slender southern orphan to be the pathfinder of a continent, the pioneer of the last great wilderness-exploration that the globe can require, the climber of the topmost peak of the continent, with his country's flag in his hand.

The least that intellectual honor challenges of every workman is that he aim to grasp and comprehend his own employment. But let him beware of half-notions as to the limits of that demand. *That* study reaches further, and will last longer, than a superficial glance would imagine. Be the employment what it will, it reaches forth, by some of its ramifications, into remote recesses of creation; it strikes its roots down among the secret facts of the world. No man can thoroughly educate

himself *into* his own business without being educated *above* it. I am not speaking of that perfunctory, outside knowledge, which is all that a majority of men ever get of their trade; just sufficient for a decent performance and an earning of bread; because it is between comparatively few men and their work, that a cordial intimacy, such as comes of interior knowledge, ever grows up. To extend that inquisitive class, is the ministry of all such associations as this — to make scientific Paul Prys, intense Yankee question-askers, bent on worming out all the domestic secrets of that cunning housekeeper, Nature. You will find, for instance, that a mason cannot thoroughly know masonry, without knowing the laws of architecture, the composition of the atmosphere and the effect of climatic changes on structures, the meteorology that subjects to science the draught of a chimney, the history of building, the principles of drawing, the significance of the orders. A really well-educated merchant will need to know political economy, to know statute-books, to know navigation and manufactures, to know physical and statistical geography, to know the principles as well as the current rates of exchange, to know the wants of many markets, and the languages of many countries, as well as to know men, and the manners that breed civility and conciliate success, in all countries, at the common court of honor.

Take a more minute department. If a silversmith will make a complete study of his work, travelling up, step by step, on the line of that single business, and not leaving the train of connected suggestions it opens, he will go first to the mine where the science of metallurgy confronts him; where also stands the mining art, with its engines, and water-wheels, and shafts, its blasting, and draining and extraction, with pulley, inclined plane, and hydraulics; the history of mining, too, running back into savage epochs, beyond Phœnicia and Tyre; the distribu-

tion of mines, and their implication in social problems, and their legal relations to surface-ownership, freehold and lease and rents. Then the science of mineralogy sets in, with its properties and classifications, its doctrines of form and composition, its branchings out into crystallography and optics, its acid, alkaline and neutral bases. This hands him over to geology, which will take him, if he will be taken, back through the dim beginnings of creation, among pre-Adamic periods and antediluvian formations, setting him against the rocky questions of cosmogony and interpretations of Genesis. Then, if he will turn back to the silver in his hand, he sees in that a white, malleable, tenacious substance, of which he has to learn — before he understands it — its specific gravity, the vitreous and black varieties of its ore, what metals it combines with, how it absorbs and gives out oxygen, is tarnished by sulphuretted hydrogen, takes on the appearance of granular crystallization, and may be alloyed with copper. Then, its manifold uses: how nitric acid gains from it lunar caustic for the surgeon to assuage pain, how simple mixtures with it produce indelible ink, how it is wrought into a thousand shapes of artistic beauty, to be ornaments for taste and gifts for friendship, and implements for use, to lie on bridal tables and glitter in the equipage of wealth; how it is cast into bullion, how it goes stamped as coin into all the circulations of commerce — takes the impress of character, gets pinched in the miser's grip, slips readily through the spendthrift's fingers, bribes guilt, and blesses poverty, runs into the contests of politics, affects currency, makes tedious speeches in Congress, and goes through all the channels of traffic and the pockets of men — and of women, too, they say, sometimes — mixing with and modifying all the deep tragedies and comedies of life, as they act their dramatic realities over the globe.

I give this, of course, only as an instance how the Brain, put in contact with only a special and limited department of work, stretches it up and down the ages, through the whole circle of the sciences, and even into the moral mysteries of the soul. Does the silversmith, sitting at his workbench, consider his calling?

You see how easy it would be to multiply these examples. The mind is an infinite and tireless traveller, out-voyaging Columbus or Cook, out-marching Audubon and Humboldt, out-watching Laplace, Herschel, telescopes, the stars themselves. Begin where you will, study will lead you out towards an ever-widening circumference. All truth is one. The sciences interlace their fibres. The smallest arc joins into a full majestic circle. Strike down where you stand, right under your feet, to investigate the commonest topic or fact, and, if you only keep on, the vein you hit will lead you to the end of the world, and over all the galleries of the centuries.

The practical point for us all is to escape contracted notions of our calling; to enliven and illuminate it by evoking its intellectual nobility; to be waked from the poor delusion that we *understand* our calling, only because we can respectably do some of its outside offices. The Brain asks more than this. It asks what has been done in it, and by whom; what is possible to be done in it, and by what means. So your standard of action is elevated by your knowledge, and, in turn, your expanding ideal stretches the actual performance. No housekeeper is fit to carry the keys who can be satisfied so long as there is better house-keeping done on the planet than between her four walls. So of the shoemaker, the railroad contractor, the blacksmith, the tailor. The mind's energy brings the whole average up, and equalizes every art to the possibilities of things. Thought and study grade the whole of life by the Alpine heights of its grander achievements.

Every solid human interest has successive stages in its progress, and every stage its wants. Mechanic art seems to me to have now reached that point where its chiefs and masters should look beyond the mere personal and financial result to the intellectual dignity and beauty involved; prized for their own sake. The true mechanic will ask not only how he may attain his mechanical object, at the least expense, and for the largest profit; he will have a sacred veneration for his art that will prompt him to give every piece of workmanship he finishes the highest perfection its nature suffers, regardless of any coarser recompense. There is an idea of thoroughness — an appetite for the best — a love of a perfect thing: the finish of the fabric, the polish of the blade, the grace of the machine — like what was seen in Jesse Ramsden's instruments. It is *not* the low lust of pay that crowds your exhibition-room with models. It is the passion for excellence, in itself — one of the noblest things in any man. It is the parent of intellectual enthusiasm. Just as there is a certain scientific ardor and an artist's delight in the higher examples of every learned profession, so in these popular avocations where science lends itself to the building of machines, and roads, and factories, there is a self-forgetful devotion to the completeness of the enterprise, which is the glory of the business. Some of the most thrilling passages in the annals of science and the arts — an honor to your profession and a light to us all — are records of such self-oblivious enthusiasm — the mortal body and its life quite bent under by the mighty ecstasy of the Brain; Pliny, pursuing his volcanic investigations to the crater's edge, and so the lover of Nature perishing in his eager watch for her Titanic throes; Anaxagoras, the astronomer, when rebuked for neglecting civic offices, replying, "My first care is for *my* country in yonder sky;" Eudoxus praying that he might approach the

splendor of the sun, though he should melt in its fervent heat; the youthful Malebranche taking up a volume of Descartes casually in a bookstore, and so excited as he read on that a palpitation of the heart obliged him to lay it aside; Sir John Franklin quite offering up the fleshly comfort to the all-commanding thought; Dante, going out to see a pageant in the city, but plunging into an abyss of contemplation in the street, profound as his own Inferno, where he saw no passing procession save the airy one of things invisible to mortal sight; Richardson, a printer's apprentice, stealing hours from sleep for reading, but scrupulously paying his employer for the candle by which he perpetrated that sinless theft; Rousseau, literally delirious with the first conception of the Treatise on Arts and Sciences; and Rittenhouse, the mathematical instrument-maker, and successor to Doctor Franklin as the President of the Philosophical Society, actually fainting with the intellectual agitation of observing, after long expectation, the transit of Venus across the disc of the sun.

Consecrations to the spirit of knowledge so disinterested and heroic as these exalt any vocation — none more than yours. They create a genuine nobility, independent of college diplomas or the patronage of wealth. They form a brotherhood of thinking Heads and working Hands, fit to be the reformers of mankind. Yet, that they may ascend to that purer eminence, another element of the threefold man must assert its place, superior still. And so we enter yet further and deeper into him, and find, at last, his Heart.

III. By the Heart I mean that central organ in man which unites him with his fellow-men, and so makes the best object of his acts and thoughts the welfare of his race. No mechanic, however ingenious the articles he fashions, is symmetrically developed, or educated, till he recognizes that bond. No work-

man, I hold, whatever his income, has true success, till, in all his labor and contrivance, he has respect for something wider and deeper than his own purse, or fame, or even the mere perfection of his workmanship; that is, for Humanity, Freedom, Truth and Right. And this he does with his Heart. The last earthly object of every useful art, and every ingenious invention, is to reach the vital springs of society, to ennoble its estate, purify its relationships and dignify its manners.

A striking proof of this is found in the fact that the appearance of original men has always been called for by peculiar social conditions — showing that God always values men more than abstractions, and the people more than institutions. Periods of intellectual activity have been times of heaving revolutions, of growing empires, of nascent commonwealths. Your own Association furnishes an instance, honorable enough to have mention any where. Its origin was essentially revolutionary. The energies that give it being were stung into activity by the Stamp Act and the Boston Port Bill. For it was just in the vigorous youth of the republic, under the bracing influence of the recent perils and struggles of the war — a war which their own sturdy sense and clear-sighted patriotism and strong right arms had helped most signally to carry to its proud result — that the mechanics of the town of Boston met at the old “Green Dragon,” to institute this very fraternity of industry and charity — sending abroad every year new mercies at home, and new inventions through the world. As a toast offered at a festival made by your Association thirty-one years ago, in honor of the visit of Lafayette, June 20, 1825, three days after the corner-stone was laid for the monument at Bunker Hill — so happily and dynamically expressed it: “Our revolutionary mechanics: their intelligence was the lever which upset the colonial government — their bravery the screw which kept

down the enemy — and their honor the pulley which lifted the country to independence." Indeed, it is quite striking that the brilliant cluster of mechanicians that have given such progress and lustre to the mechanic arts in America were born or bred in this revolutionary period — Fitch, Evans, Fulton, Franklin, Slater, Whitney, Perkins, Whittemore, Eckford. Could we only look far enough down into the underlying harmonies of things, and read history from that point, we should see how human wants are the divinely commissioned begetters of all intellectual power. Before a great seer, or doer, or inventor is born, hidden causes, working in the bosom of God's social family, require him. Every splendid discovery is wrung out of reluctant, inexhaustible Nature, at the cry of a mortal desire. Not more certainly is the planet built for man than every intellectual birth in it is a straight answer to his solicitation. So the religion of Judea and the Norse manhood — Love and Strength, or Heart and Will — met and married on the old Roman hearthstone, to generate a new line of ideas and of persons. Copernicus came to find the physical centre, just when the dawning truths of science began to demand that the axle-point of the heliocentric system should be fixed. The age of Raphael opened just when the rough lineaments of western civilization supplanted, inarticulately, the refining graces of Christian art. Every age, and every jubilee in it, every glorious and hallowed Sabbath, is made for man, not man for it. Columbus was but the finger of one crowded continent, feeling after room and rights in another — an industrial America to atone for military Europe — a missing hemisphere to finish the fragmentary globe. Lord Bacon was the answer of tired scholasticism, begging to get out of the labyrinth into a simple path. A hurrying century felt hindered in its restless emigrations, and Fulton came up to help it along. Busy and intimate and related and yet

widely divided nations ached for instant conversation, and Franklin found, and Morse equipped, the nimble medium that should be a tongue for all latitudes, talking face to face.

A thorough and principled confession of this vital relationship between personal progress and the good of society, appears to me one of the prime necessities of even our modern and American systems of industry and education. Take an example. If our fifty thousand educated heads, in America, were fifty thousand Christian hearts also, think you that for every one of them there would be five other intelligent persons, at least, in the nation, that wait for work, and can find no honest paying work to do? There is one problem. That here, in all New England, there should be no skill yet, no captain, no marshal, no engineer, to put so much idle capacity to some satisfying and fruitful labor, seems to me a dismal satire on our boasting; and that so few should be concerned about it, an intellectual crime. The age does not want mere manualists and functionaries, but whole-souled lovers of their kind. It does not want embalmers with their spices, but planters and Promethean lungs; not ideas plastered in pyramids and mausoleums, but moving in marts and throbbing with the pulsations of joy and love. And if these happen to be a little unlike the old fashions, have no fear of being called visionaries — so long as you see what you say — whether your neighbors see it, or blink it. See visions — it is the thinker's vocation; and turn them into facts — that is the workman's business. Dream dreams, and bring them to pass. Yonder exhibition rooms are full of such dreams brought to pass — embodied shapes of visionaries' silent reveries. Be hospitable to every faint, uncertain beam that straggles to your window. Who knows but it may travel from the skies, and have a sun on its track?

It comes to this: personal character, with altitude and breadth of manly stature, is the chief matter. Man is one with the species. If knowledge is to help society through him, it must only make him more entirely, largely, heartily, a man — disengaging every energy in his structure, teaching him at once the immensity of his trust, the completeness of his dependence, the wide openings for his wit, the possible splendors of his fate. To unbind the coarse clasp of poverty galling his affections; to emancipate him from the fear of mean masters jobbing with his conscience; to lead him out over the limitations of superstition humiliating his honor; to pacify those angry antagonisms that torture him with a perpetual terror of defeat; to abate the vulgar competitions that would make the holder of property a watch-dog over his heap; to wash out the vices that stain his soul, and animate the lethargy that benumbs his prayers; — this is surely the laborer's complete success.

Here, then, gentlemen, open upon us worthy objects for the ambition of the manly mechanics of a Christian age. These many centuries the mental character of the race has been slowly ripening towards this moral and social maturity. Oriental antiquity unfolded the theosophic instincts, and fed exploring fancies with fables of impossible adventures by impossible monsters. But the ascetic's creed, like the sand and rock of the deserts where it grew, discouraged industry, and the haughty dreamer treated the hungry serf with contempt. Grecian culture refined the perception of Beauty. But even from the golden tongue of Plato, and in the ears of Archytas, it ridiculed what it called the condescension of science to the business of improving machinery to lighten the handicrafts of laborers. Roman discipline marshalled the faculties of man under that stern Duumvirate of the Will and the Talent for empire. But "the finding out of things useful," Seneca was

silly enough to say, "is not the work of a philosopher, but drudgery for slaves." The valor of the North has battled for ancestral privilege, and hereditary national renown. And now the rising Genius of the West appears, to be called to a more exalted ministry yet. If it has stooped a little to gather the material jewels scattered so prodigally at its feet, let that be pardoned to the impetuosity of a young nation's blood, and the pressure of the temptation. Its true destiny is to emancipate and to bear forward the whole oppressed and obstructed life of man into its due liberty and victory. When the banner of the republic was unfurled from a rifle ramrod on the icy peak of the Rocky Mountains, by one of the bravest sons of science, it was not merely a conquest of physical adventure; it was a type of our national enterprise, a prophecy of the part we have to play in rearing the great Home of equality and freedom for social man. Every mechanic has a personal interest in that peaceful capture of the wilderness—that splendid symbol of the final subjection of the empire of Nature, in her vast and most imperial solitudes, to the empire of man in the might of his Hand and Brain and Heart. The ocean to which those subjugated mountains look off—that globe-completing sea, on whose shores the last and grandest act in the world's unfolding drama is to be displayed, is the PACIFIC; name of hope, of promise, of consolation, to the weary and warring and westward-looking tribes of men!

In the settlement of those social problems which now agitate and threaten, I believe that an intelligent industry has more to do than many people have imagined. The poverty of our great cities—the terrible idleness and consequent degradation of woman, inequality between work and wages, between capital and labor, slavery—all these involve questions which you help to settle, just so far as you inform workingmen with just ideas

of their work, and refine the people with intelligence. That may happen again, in substance, which happened in the reign of Edward, when the introduction of woollen manufactures into England lifted up the serfs of feudalism, and a new order of self-respecting laborers was installed in British society. Open such a display of the fruits of industry as now adorns Market street in every city of the slaveholding States, and it would do more than ten thousand platform harangues to break the bondman's chains. Plant the power that your machinists know how to gear along the water-courses of the South, send a few Brindleys, Slaters, Storrows, Lawrences, Olivers, Winchesters, as missionaries among them, and you would make emancipation as much the interest of the master as the joy of the slave. In fact, I regard your Mechanics' Charitable Association as a sort of practical anti-slavery society — quietly *working out* the demonstration which so many tongues are *talking at*.

Be assured, new greatness awaits thinking and working men, when they shall look beyond private promotion, and make these humane enterprises their immediate concern. The preamble of your Constitution contains an explicit recognition of that truth. Take Philosophy: Is it not in the nature of things that her very soul should expand — for she has a soul — when she turns her discoveries into treasures of mercy, and then scatters them by the waysides of common hardship, at the doors of the poor, or where the children of men grow faint, and pale, and thin, with unrewarded toil? The Arts: Can they help springing into more vigorous activity, when they feel themselves to be like angel hands, beckoning up, with their bright fingers, the neglected and debased to honorable places in the great family mansion of Christendom — a reinstated line of heroes and kings brought back from their banishment of ignorance and crime? Commerce must appear a science of broader scope than the bloody

cruises of the days of Elizabeth or the avaricious merchandise of money-loving moderns have made it, when glorious expeditions of brotherly kindness chase each other into the Arctic ice, each eager to shelter its predecessor from the perils of polar night and frost — when fleets of mercy wing their flight from shores of plenty and health to starving lands and pestilential cities — when peaceful navies fill their ribs with mutual blessings, mails, missionaries — and navigation is no longer the angry armor-bearer of appetite, but the friendly cup-bearer of Christian charity, from port to port, in the great festival of the climates. Knowledge needs only to let the heart beat in its breast — to be what Humanity asks of it — not a sallow monk, dreaming in a clammy cave; not a selfish Sybarite, gloating over its dish of delicious reputation; not a paramour, dallying with the passions; not a respectable servant-in-waiting, keeping the door of pompous patrons; not a mystic dervise, gazing complacently at its own interiors — but the breathing, sympathizing broad-shouldered and whole-souled benefactor of the people. Under an education of industry truly catholic as this, publishing glad tidings with beautiful feet upon the mountains and in city streets, places that the old civilization left barren with bitter tears, shall be fruitful as Carmel, and the real golden age, not classical but Christian, be installed with a general Pentecost of love.

There is a glorious possibility, which has sometimes haunted the dreams of thinkers, at whose grandeur all common hopes of scholars kneel with veneration. It is the unity of all sciences — arts, labors, letters — under one all-embracing and connecting principle, or law. If that majestic idea shall ever be realized, what shall be the one unifying truth? What girdle shall be vast enough to encircle all knowledge? What principle shall be comprehensive enough to contain all systems,

schools, discoveries, conclusions — clasping into its starry belt all the constellations of human thought? I answer, it is no other, it can be no other, than the Brotherhood of men, beneath the Fatherhood of God.

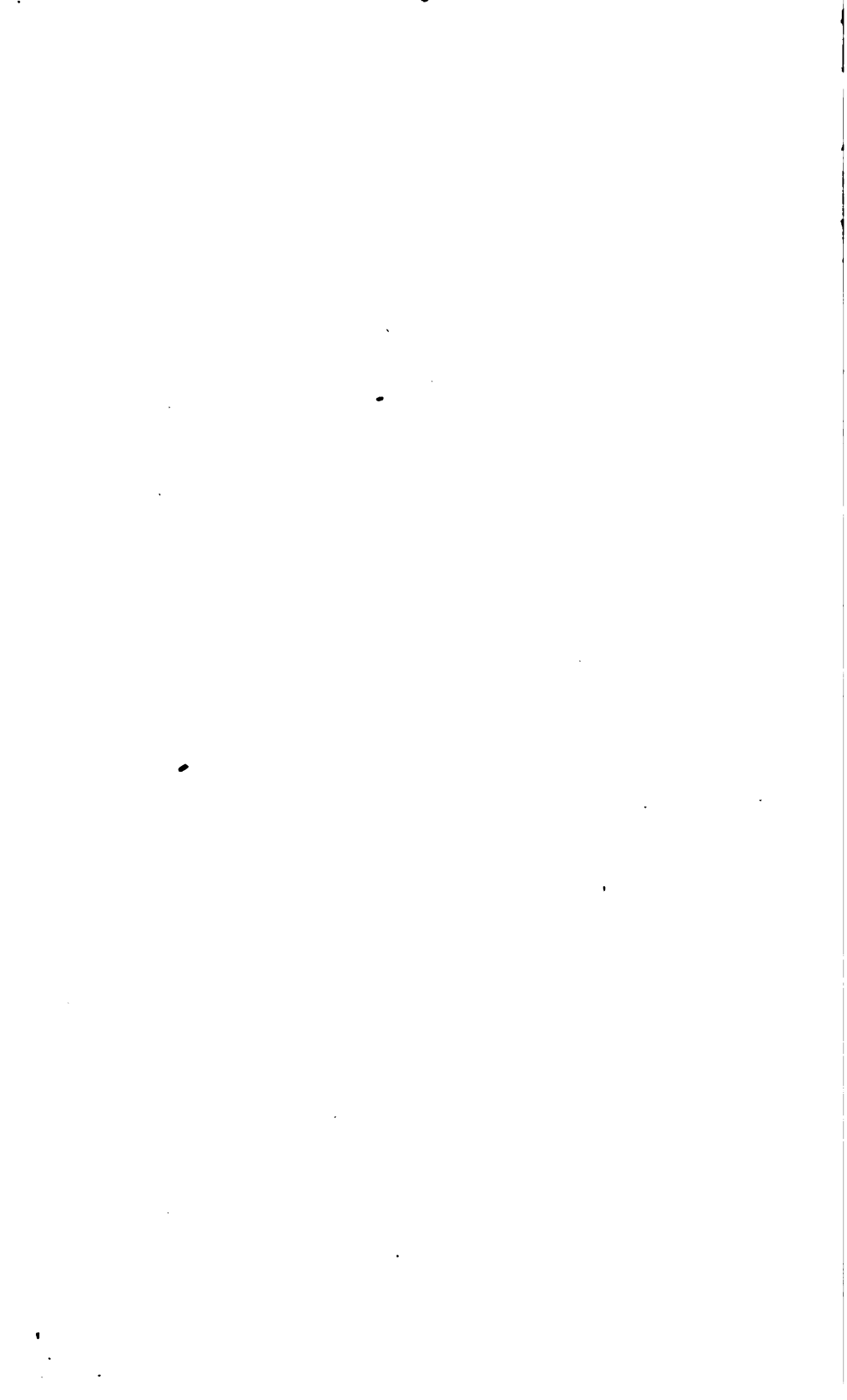
I remember, gentlemen, that one significant and gracious term in the title by which you are so honorably known is "Charitable!" What an undertone of Christian melody that soft word, charity, breathes through all the rough collisions of the shop and the market, all the conflict of the Hands, and the contriving of the Brain! It speaks of the hallowed amenities of home, where delicate tastes assemble, and simple pleasures breed content; of the workman's genial evening, after the working-day is over, where music, and woman, and childhood, refine the out-of-door roughness with peace and purity; and where man learns to scorn the vulgar calculation which would rob the familiar household of graceful courtesies, to pay them all away in politic politeness to the customer at the shop. It speaks of the conciliating influence of such jubilees as this you are holding, bringing kindred faces together, healing jealousies and cooling the fever of rivalries, wakening a generous goodwill, melting misunderstandings, creating a common spirit. It speaks of pity for the needy neighbor, who has gone down, overborne in the fierce competition or calamity of life, and of sorrow for the tempted one, falling by the way — of the magnanimity that rescues Hunger from despair — of the liberality that leads the widow and the orphan gently. Every benevolent cause has a fuller treasury for the large-hearted mechanic's bounty; all good learning, a servant and a patron in his munificence; the church an unostentatious worshipper, and a sincere defender against time-serving, hypocrisy and cowardice, in his believing confession and his godly life.

So, then, my three-fold theme completes its circuit. Hands, Head, Heart. In the consummate kingdom of a man, the Hands are offices of departments; the Head is the hall of legislation, the Heart is the holy of holies. In the personal administration, the Hands are the executive; the Brain is the lawgiver; the Heart is the prophet of God. The Hands perform, accomplish, do; the Head designs, organizes, shapes; the Heart inspires, ennobles, humanizes. A man is wide with his hands, high with his head, but deep with his heart. For the Hands you look *out*, for the Head *up*, for the Heart *in*. Grand and witty forces as brain and fingers are, the heart is a grander strength, and rules by a diviner right. All valor and goodness are by that. For into that descends, if only the door of faith stands open, the spirit of the Holy One, Fountain of all light and purity and power.

Here, then, my fellow-laborers and fellow-students, is our present task, and our future way. Standing here on this eastern and original shore of the westward-opening country, it is our part to aim at liberal, rational, fraternal forms of social life. All the omens and conditions favor us. They point to the expanding cluster of growing commonwealths. In that august American crucible where the Divine Chemist is pouring the mixtures of the earth's elder bloods, to yield a fair, and, Heaven grant, a lasting sway of justice and love, there must be a contribution, and yet a correction, of every stock that has flourished under the sun: the strong heart of the Saxon, without his bloody hand — the graceful loyalty of the Norman, without his levity and pride — the bravery of the Celt, without his impudent ferocity — the iron will of the *Senatus Populusque Romanus*, without the audacity of its ambition and the cruelty of its eagles — the airy ingenuity of the Greek, divorced from the worship of the senses — the reverence of the Hebrew, cleared

of his narrow nationality — and the heaven-piercing gaze of Chaldea and Shinar, without their superstition — looking above all the stars of science, and the differing glories of their devotees, to Him who walketh in the midst of the seven golden candlesticks, and holdeth the stars in his right hand.

With such aims and convictions as these, there is no destiny too auspicious for the land. Learning would become the preceptor of industry, the crown of enterprise, the ornament of the republic, a minister of the church. Art, handmaid of religion, science, elevator of humanity, literature, the voice of experience, and labor, the body of thought, would combine their constructive offices for rearing the open temple of our life. And in building that sanctuary, hands, brain and heart, our Artificer, Designer and Prophet, should do all things after the pattern shown them in the Mount — the Mount of the adoration and vision of God!



12
THE NEW YORK
PUBLIC LIBRARY

P 27269

ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1908.

AN

ADDRESS

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

AT THE CELEBRATION OF THEIR

SEVENTEENTH TRIENNIAL FESTIVAL,

AT FANEUIL HALL,

October 14, 1857.

BY JOSEPH M. WIGHTMAN,

PRESIDENT OF THE ASSOCIATION.

★ MASS. INST. SOC.

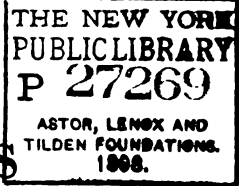
GEO. C. RAND & AVERY, CITY PRINTERS,

No. 3 CORNHILL.

1857.

AN

ADDRESS



DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

AT THE CELEBRATION OF THEIR,

SEVENTEENTH TRIENNIAL FESTIVAL,

AT FANEUIL HALL,

October 14, 1857,

BY JOSEPH M. WIGHTMAN,

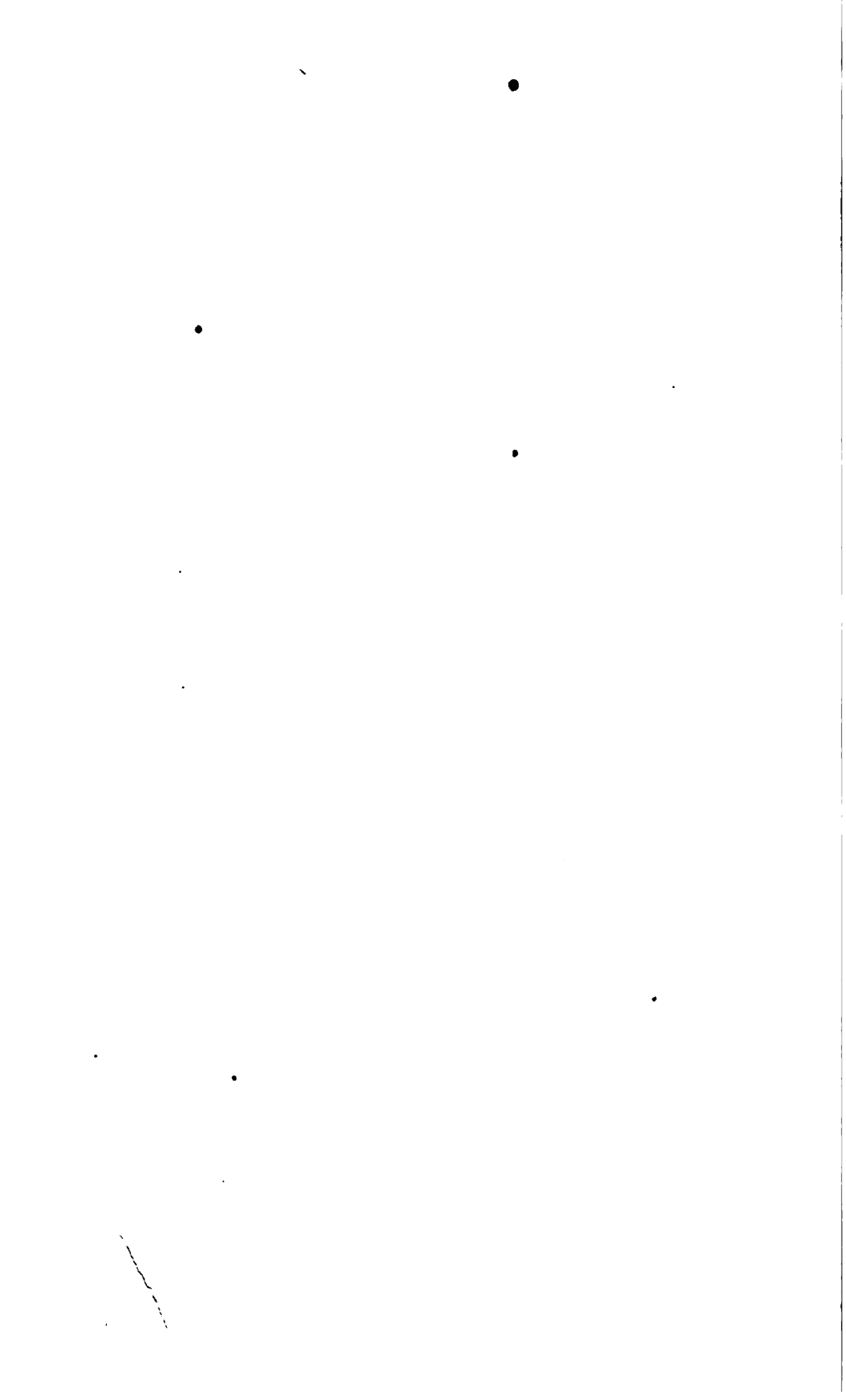
PRESIDENT OF THE ASSOCIATION.

BOSTON:

GEO. C. RAND & AVERY, CITY PRINTERS,

No. 3, CORNHILL.

1857.



A D D R E S S .

FRIENDS AND ASSOCIATES,—The Constitution of our Association declares, that “Every third year from 1821 there shall be a public festival, in October, on which occasion an address shall be pronounced by a member. These addresses have been usually delivered in some public hall, or church, with appropriate ceremonies. In conformity with the desire of the government, this arrangement was changed at the last triennial celebration, for a less formal and more brief address from the President at the festive table.

My immediate predecessor performed this duty so ably and satisfactorily, on that occasion, as to induce the present Committee of Arrangements to adopt a similar course.

It is now forty-eight years since our first triennial festival was inaugurated, by an eloquent address from the President, BENJAMIN RUSSELL—a name familiar in our history and in the annals of our city and commonwealth. Honored and respected by his fellow-citizens during more than thirty years of public service, and endeared to us by a membership of half a century—

during fourteen years of which he was the President — he is justly entitled to our grateful recollections on these occasions, at which he has so often presided, to the pleasure and delight of our associates and their guests.

Instituted under such favorable auspices, these festivals have always been honored by the presence and participation of those high in official station, and eminent for their learning, eloquence or public services; and we are happy to greet with a cordial welcome so many of them on this occasion.

It is also with heartfelt pleasure that on this, as on several previous festivals, we welcome those whose gentle sympathy and cheerful smiles, like sunbeams, light the rough and stormy pathways of our life. Welcome, most welcome is woman's presence here!

To our distinguished honorary members, to all our guests and friends, we bid a hearty welcome. We welcome them here in Faneuil Hall, the memories of which are closely entwined with those of our Association.

There, in yonder niche, is the marble bust of the revolutionary patriot and President, JOHN ADAMS, the first honorary member elected by this Association.

Here, on the right and left, are the lineaments of JOHN HANCOCK and SAMUEL ADAMS, the friends and compatriots of REVERE.

And there, — standing in all the majesty of conscious

power, bearing on his matchless brow the seal of genius and eloquence,—is the Senator of Massachusetts,—the Defender of the Union,—the statesman of America,—he whose transcendent talents have shed a lustre on the page of our history, and whose revered name on the roll of our honorary members we cherish with pride and affectionate remembrance. Ever green may his memory live in our hearts, and may his lessons of wisdom and patriotism be honored and cherished while our country holds her place among the nations of the earth.

On these occasions,—surrounded as we are with friends and festivity,—breathing the perfume of flowers,—and listening to the thrilling tones of language or of music, we are apt to yield to the fascinations of the hour, and forget those to whose exertions we are indebted for many of the blessings we enjoy.

Let not this be our reproach ; but let us with grateful hearts review the Past,—reflect upon the Present,—and with hope and confidence look towards the Future.

For more than fourscore years has Providence smiled upon our course, and spread golden prosperity around our path. Prudence has insured success, and wealth has laid her tribute at our feet. But it is not worldly wealth that should excite our pride ; it is the bright catalogue of noble men which is found recorded on the

roll of our Association — men distinguished alike for their fervent patriotism, and for their mechanical skill and integrity.

Foremost among these stands out in bold relief our first President, PAUL REVERE. Skilful as an artizan, — enthusiastic as a patriot, — the gold which he worked with his hands was but the semblance of the purity of his heart and the sterling patriotism which characterized his life. The spirit of liberty he had inherited as a Huguenot, made him the able coadjutor of ADAMS, and OTIS, and HANCOCK, in their resistance to tyrannical legislation, — and inspired him to become the daring leader of the “Boston Tea Party,” which, in the disguise of Indians, practically annulled the “Stamp Act,” by destroying the first cargo which bore the obnoxious seal of despotic power. Active and energetic, he exhibited a versatility of talent peculiarly adapted to the times. In 1756, at the age of twenty-one, he was commissioned as a Lieutenant of Artillery in the military demonstration against the French at Crown Point. The next year he returned to Boston, and pursued his trade with diligence and success. But his public spirit never tired, or was at rest. As an engraver, he used his art to excite the public mind by bold caricatures of subservient officials, and arbitrary acts of parliament, — to fan the flame of popular indignation by vivid pictures of the slaughter of the citizens at the King Street mas-

sacre, and to make the bills of paper money authorized by the Assembly of Massachusetts, to carry on the struggle for freedom. He was the confidential messenger from the Provincial to the Continental Congress,—the trusty spy upon the movements of the British troops in Boston,—a Lieutenant Colonel of a volunteer regiment for the defence of the State, and held many other positions of trial and trust during the war; in all of which his energy, courage, sagacity and skill were equal to all emergencies, and his heart and hand were ever ready and devoted to the cause of American liberty and independence.

I have here in my hand a little piece of rough, thick, paper—dingy, soiled, torn and almost illegible. It is one of those bills to which I have just alluded, as having been designed, engraved and printed by the hands of PAUL REVERE. Upon one side is inscribed the following:

Colony of the }
Massachusetts Bay. }

No. 688.

Aug^t 18, 1775.

The possessor of this Bill shall be paid by the Treasurer of this Colony, Five Shillings, lawful money, by the 18th Day of Aug^t 1778, which Bill shall be received for the aforesaid sum in all payments at the Treasury, and for all other payments, by order of the General Assembly.

Committee, { S. DEXTER.
 { JOS. WARREN.
 { MOSES GILL.

On the other side of this bill is the figure of a patriot, with a drawn sword in his right hand, and a

scroll, with the words "Magna Charta," in his left. Around him are the words "Five Shillings. Issued in Defence of American Liberty," and the motto of our state: "Ense petit placidam, sub libertate quietam."

Intrinsically, this is insignificant and worthless; but how valuable and interesting is it to us, as a relic of the past! The past! how often does it float before our mental vision, like the dim, undefined pictures of the phantasmagoria! but how real,—how, as if by magic, is it quickened into life, by the presence of a relic of the time or the event! How wonderful is this association of certain objects with certain events! A rude brick from the ruins of Babylon or Nineveh,—a fragment from the Pyramids, or the Parthenon,—like a talisman of the genii, will transport us back to the time of their primal splendor, glory, and renown.

Such a talisman is this little scrap of paper, with its date, "August 18, 1775." As we look upon it, how many circumstances in the early history of our country, and stirring scenes in the trying times of our fathers, are presented to our view? On the 19th of April, but four months previous, the first blood of the revolution was shed, and "the curtain rose on that mighty drama in the world's history, of which the quiet villages of Lexington and Concord were the appointed theatre."* Two months later, on the 17th of June, the

* Edward Everett.

scene was changed to Bunker's Hill, and WARREN sealed with his own blood, his title as a martyr and a patriot. With this sad experience,—with an exhausted treasury,—with no means to meet the expenses of a war,—with a full knowledge of the penalties of an unsuccessful rebellion,—standing alone, without aid or allies,—with no resource but the iron will and sturdy patriotism of her own citizens,—the General Assembly of Massachusetts, assuming the prerogative of independent sovereignty, ordered the issue of these bills, to the amount of £50,000 sterling, nearly a year before the Declaration of Independence, and six months before the Continental Bills were authorized by Congress.

In this hour of trial, PAUL REVERE was relied upon by the Assembly to engrave the bills, but no copper for the plates could be procured in the colony, and he was finally compelled to engrave the bills on the back of the same plate on which his sketch of the massacre of the 5th of March, 1770, had been engraved. This plate is now among the archives of the State, so badly mutilated by destroying the face on which the bills are engraved, as to render all impressions exceedingly imperfect. The late Dr. John C. Warren, in his indefatigable researches for information connected with the life of his distinguished relative, General Joseph Warren, discovered this plate, and obtained the consent of the State authorities to have a few impressions taken from them. A series of these he kindly presented to our Association,

and they are regarded as interesting memorials of our patriot President.

In 1788, the subject of the adoption of the Constitution of the United States, was agitating the public mind to its centre. The opinions of the most eminent citizens and revolutionary patriots, were divided upon the question. Even WASHINGTON and FRANKLIN had their hopes mingled with doubt in regard to it, but supported it on the ground that, in the aggregate, it was the best Constitution that could be obtained at the time. JOHN ADAMS and THOMAS JEFFERSON, were absent at foreign courts, and SAMUEL ADAMS, JOHN HANCOCK, and PATRICK HENRY were opposed to it, as an untried experiment of doubtful success; while MADISON and HAMILTON, aided by the JAYS, PARSONS, and KINGS, were pressing its adoption with all their ability, talents, and eloquence.

Under these circumstances, the proceedings of the State Convention of Massachusetts were watched with the most intense interest and anxious solicitude. At this crisis, the mechanics of Boston rallied to its support, and after several meetings held at the Green Dragon Tavern, they passed a series of resolutions in favor of its ratification, and marching in a body with their presiding officer, PAUL REVERE, at their head, presented them to the Convention then in session, at the Federal street meeting-house.

Shortly after, on the 6th of February, the Constitu-

tion was adopted ; and whatever influence may be attributed to this act of the Boston mechanics, time and experience have proved the correctness of their judgment, and the wisdom of their proceedings on this momentous question.

Seven years after this, the mechanics of Boston are again convened at this same old Green Dragon Tavern, but for another purpose. The privations and ravages of war had ceased,—national independence had been secured,—the Constitution had been adopted by the several States,—a Republican government was firmly established,—peace shed happiness and prosperity over the homes and labor of a free and intelligent people. It was under these circumstances, that the mechanics met at their old “Head Quarters,” for the formation of a permanent organization among themselves, for the purpose, as they expressed it, “of promoting mutual good offices and fellowship; assisting the necessitous, encouraging the ingenious, and rewarding the faithful.” Here, again, the presiding genius is REVERE, but with him are many other kindred spirits and true men. HENRY PURKITT, the cooper, who acquired his trade, and received his first precepts of patriotism from one of the memorable “Tea Party,” and won honor and distinction as a soldier under WASHINGTON at the battles of Trenton and Brandywine,—EDWARD TUCKERMAN, the baker, whose unobtrusive benevolence commenced each

year by cancelling the bills of all his customers who were unable to pay,—RICHARD FAXON, the blacksmith, whose well made axes and edge tools hewed out for him the road to fortune,—EDMUND HARTT, the North End shipwright, who planned and built the Frigate Constitution—Glorious old Ironsides! whose every timber, plank, and spar has so often rung with the shouts of victory. Invincible in battle, and shielded by Providence from the storm and tempest, she still rides upon the ocean, the noble standard bearer of our country's flag, and the proud exponent of her birth-place and her name.

With these are RUSSELL, whose "Columbian Centinel" was always found on guard,—and CALLENDER, and GORE, and HICKS, and PERKINS, and a host of others not less worthy or renowned as mechanics and patriotic citizens,—who continued to meet from time to time until a plan of organization was perfected, and the original Mechanic Association was established.

The sun has set upon the earthly career of the originators and founders of our Association. Not one remains. But their example is our heritage. Let us cherish their memories,—let us emulate their love of country,—and endeavor to sustain and preserve the institution they established, on the only safe foundation,—that of integrity, intelligence, and virtue.

Having thus paid that tribute of respect and honor to the original members of our Association which they so richly deserve, permit me to claim your attention to a brief consideration of other subjects, which are proper to the time and occasion.

In the annals of time, how brief a period is represented since the formation of this Association, sixty-two years ago! But in the history of Science and Art, how wonderful are the achievements comprised in those years! The contemplation cannot but startle and surprise the most fertile imagination. The mind looks back with amazement, and forward with curiosity and wonder.

Discovery seems as boundless as the Universe, and Invention as illimitable as the laws of Nature.

We can scarcely realize the rapid succession and vast importance of the inventions and discoveries which have been made since the commencement of the present century. It dawned upon the successful development of an agent as unrivalled in its physical force as in its transcendent moral effect upon the world. The genius of WATT had surmounted all difficulties, and brought the mighty power of steam within the circle of mechanical invention, and, by a beautiful system of contrivances, had rendered it obedient to the will and perfectly subservient to the control of man. By his invention the boundless mineral wealth of England be-

came accessible, man was relieved from the *slavery* of toil, and labor was reduced, in a great degree, to light and easy superintendence.

A few years later, and FULTON entered upon another field, and the dash of the paddle-wheel reverberated along the shores of the Mississippi, while the leaves of the cypress waved a mournful requiem to the departure of the red hunter of the forest. The torch of civilization flashed upon their path, and they have passed away like the dew of the morning before the rising sun. Magnificent cities now cover the mounds and graves of their fathers; trade and commerce whiten with their sails their ancient fishing grounds; noble rivers and lakes, stretching from the St. Lawrence to the Gulf of Mexico, with all their tributary streams, have been rendered navigable, and millions of acres of the most fertile land upon the globe have been added to our glorious inheritance by the patient genius of FULTON, and the power and application of steam.

Who can realize that on the second day of October, 1807, just fifty years ago the present month, the first steam vessel made its first voyage from New York to Albany, and satisfied the hopes and anticipations of its projector by accomplishing the distance in thirty-two hours, or at the rate of four miles an hour. As FULTON stood on the deck of the "Clermont," winding its way through the beautiful scenery of the Hudson, without

regard to wind or current, his heart bounding with the excitement of success and the congratulations of his friends, his enthusiastic mind may have pictured bright visions of the effect of his perseverance and enterprise upon inland navigation and the prosperity of his native land. But, wild as may have been this day-dream of the successful projector of steam navigation, how obscurely did it represent the realities of our day! Every river and every ocean known to civilized man now bears upon its waves the foam of the propeller or the spray of the paddle wheel. They mark the path of the explorer on the rivers of the torrid zone, or in the ice-bound regions of the Arctic Ocean.

Steamships, sumptuous as palaces in their appointments, now successfully brave the waves and storms of the Atlantic, and make their weekly trips, with bird-like speed and the regularity of a mail-coach, between the Old World and the New.

• Steam frigates, as remarkable for strength and power as for beauty of model and simplicity of arrangement, proudly bear our nation's flag in every port, not with hostile intent, but consolidating, by national intercourse, the bonds of friendship and of peace.

Glancing from the results produced by this application of the power of steam, let us turn to another, not less rapid in its development, nor less important in its effects.

In April, 1829, a premium of £500 sterling was offered for the best locomotive engine, which should draw a load equal to three times its own weight at the rate of ten miles an hour. The trial took place on the Liverpool and Manchester Railway, in October of that year, and the award was made to Mr. Robert Stephenson, who accomplished what was then regarded a new triumph in steam power. If we compare this with the increased speed and the hundred times its weight of merchandise with which one of our "HINKLEY Locomotives" now rushes along the iron track, or, with an express train, glides over it with a celerity rivalled only by the electric messenger, we feel our inability to realize from the past the future destiny and effect of this mighty agent.

Turning from the contemplation of this great physical power, we see clustering all around us so many evidences of the active brain and hands of our countrymen, that we yield to the conviction that, in the alleviation of manual labor, there is no limit to their perseverance or invention. As in trade a demand will always produce a supply, so does the mere want apparently create the inventor. This is true in relation to the Cotton Gin, the Power Loom, and all the varied and beautiful machinery for the spinning and weaving our two great staples, cotton and wool. It is also true in connection with the implements of agriculture. Observe how ex-

tensively and efficiently animal labor is substituted for that of man; how, by means of machinery invented for the purpose, the horse is made to mow and rake, to reap and gather, to thrash and winnow, with so great economy of time and labor that the rich soil of the western sections of our country may be cultivated to such an extent as to become the granary of the world.

There is one peculiar characteristic of American inventors, of which we are constantly reminded. It is, the usefulness of their inventions. Of this peculiarity we have much reason to be proud. In other countries men have spent years of toil in constructing a curious toy, of no value but as an object of amusement, when the same time and talent, devoted to the useful arts, would have caused them to be ranked among the benefactors of the human race. How much higher in the true scale of genius and invention, is the "Card-Sticking Machine" of WHITTEMORE, than the "Automaton Chess Player" of DE KEMPELIN! or that other more recent gem of Yankee ingenuity, the "Sewing Machine," than the "Wonderful Duck" of VAUCAUSON! The French artisan succeeded in imitating, with great perfection, the natural motions of a bird; but how much more worthy of praise are our Yankee artisans, who have succeeded in endowing a few simple levers and cams with the more wonderful powers of woman's eyes and hands! The automata may excite our curiosity and astonishment;

but when we see a little crank machine, not larger than a lady's work-box, executing all those mysterious stitches of female handiwork, with a delicacy, precision and celerity that set at naught the most nimble fingers, not only is our admiration excited by its ingenuity, but by its availability and usefulness.

While Art is thus expanding its bounds, Science still leads on to more extensive fields for man's investigation and research. At her summons the ocean displays its secrets, the earth reveals its treasures, and the stars explain the celestial laws. She binds the subtle lightning to a wire, and by its vibrations communicates intelligence a thousand miles in the fraction of a second.

By her magic wand, MAURY resolves the law of thermal currents, measures the vast ocean's depth, maps out its plains, and hills, and valleys, and determines the substance of its bed.

Borne on her wings, the eye of BOND penetrates the ever-deepening twilight of distance and of space; with telescopic sweep he scans the glittering arch of heaven, and solves the fundamental laws of planets and of stars, to spread the light of knowledge, to illumine and elevate the soul of man.

These are the noble triumphs of Science and the Useful Arts; and while, with manly pride, we view their progress and effect, and feel their influence upon our own social position, and on that of our cherished Asso-

ciation, let us gratefully remember that there is another cause than these, to which we should also attribute our success and prosperity. Planted by our revered predecessors, the little seed now towers, a majestic tree. But it is not Science nor Art alone that has so multiplied the fibres of its massive trunk, or spread its branches and luxuriant foliage far and wide.

● The secret of its growth and strength lies in the gentle stream of living water which has never ceased to flow around its roots.

That stream is CHARITY, which, mingling with man's better nature, expands his heart, and forms the generous bond of sympathy which makes a brother of his fellow man.

Brethren,—let it be our care that this quiet, unobtrusive stream shall still flow on to cheer the hearth-stone of the widow and the fatherless. Its hallowed presence will exalt our powers and improve our hearts, for CHARITY is an attribute of the Deity, and, like Mercy, “it is twice blessed ; it blesseth him that gives and him that takes.”

A P P E N D I X .

THE FESTIVAL.

THE Seventeenth Triennial Festival of the Massachusetts Charitable Mechanic Association was celebrated at Faneuil Hall, on Wednesday evening, October 14, 1857. The hall was very appropriately and beautifully decorated by Messrs. Lamprell and Marble, and reflected much credit upon them, and upon the artist, Mr. T. C. Savory, by whom the painting was executed.

DECORATIONS.

From the main entrance, American flags formed an arch to the inner door. The hall showed various colored bunting, extending from the centre of the ceiling to each column; and descending from this was a centre piece supported by bunting, representing the coat of arms of the Association, (the mechanic arm and hammer,) encircled by American flags. Festoons of bunting extended around the hall, both above and below the galleries, and flags of various nations drooped from the windows. A large arch spanned the eagle and clock, and on the arch was inscribed, "Mass. Charitable Mechanic Association." On the key of the arch was a full length figure of an Indian (the coat of arms of Massachusetts.) On the

pillars, the names of the Presidents, from the time it was first instituted to the present, as follows: Paul Revere, Jonathan Hunnewell, Benj. Russell, John Cotton, Samuel Perkins, Charles Wells, Samuel T. Armstrong, Daniel Messenger, J. T. Buckingham, Stephen Fairbanks, George Darracott, Joseph Lewis, James Clarke, George G. Smith, Henry N. Hooper, Jonas Chickering, Frederick W. Lincoln, Jr., Joseph M. Wightman. Painted panels, representing various trades, were placed around the galleries, and the names of some of the most noted men connected with the same surmounted each panel. Shields representing the several States on the pillars were placed between each panel.

THE TABLES

Also presented an elegant and tempting appearance, being spread by that master of caterers, J. B. Smith. To the abundance of luxuries for the palate was added the ornament of fragrant and brilliant-hued flowers.

At precisely five o'clock the doors were thrown open, and the company began to come in, a large number of ladies gracing the occasion with their presence. While the guests were seating themselves, and throughout the evening, the Brigade Band discoursed excellent music. An officer of the Association was placed at the head of each table, and the invited guests were seated upon the platform. Among them were Gov. Gardner, Mayor Rice, Hon. Caleb Cushing, Hon. Emory Washburn, Josiah Quincy, Jr., Esq., James Lawrence, Esq., Hon. Linus B. Comins, Judge Thomas Russell, Rev. Daniel C. Eddy, Hon. Charles A. Phelps, Rev. Chandler R. Robbins, G. Washington Warren, Oliver Stevens, and Charles G. Nazro, Esqs.

When all were seated, Joseph M. Wightman, Esq., the President, called the assembly to order, and invited Rev. Chandler Robbins to invoke the divine blessing. Mr. Wightman then, on behalf of the Committee, called the attention of

the guests to the good things with which the festive tables were covered, and hoped they would do ample justice to that first exercise of the programme. Accordingly all took hold with hearty good will, and found that the dinner which Mr. Smith had provided was as excellent as it was abundant, and an hour or more was spent in the pleasant occupation.

The Triennial Address was then delivered by the President, which occupied half an hour.

At the close of the address, the following ode, written for the occasion by THOMAS W. PARSONS, M. D., was sung in an effective manner, by a quartette, composed of Miss Whitehouse, Miss Jenny Twichell, Mr. C. R. Adams, and Mr. Hiram Wild, vocalists, accompanied by Mr. B. J. Lang, pianist, on one of "Chickering's" pianos.

O D E

IN PRAISE OF THE USEFUL ARTS.

Art's angel once, for human good,
Came down, commissioned to the earth,
And, lighting in some Grecian wood,
Gave to his great conception birth.

He found a roughly-glittering stone,
And fashioned thence a tool of might;
Then first the strength of steel was shown
To Tubal, and the skill to smite.

With faithful axe and goodly stroke
He wandered, scattering many a chip,
But found at last the builder Oak,
And built therewith a lordly ship.

He found the vine, a poisonous thing,
With treason in its luscious heart,
Yet forced from its envenomed spring
A subtle balm for every smart.

But men perverted steel to swords ;
 Made ships of war, and learned to deck
 Excess with flowers, and rushed in hordes
 By war and wine to equal wreck.

Art hath its dangers ; God ! whose love
 Bestowed this hand, this busy brain,
 Teach us that wisdom from above
 All arts of evil to restrain.

Grant us the useful arts alone ;
 And let the cunning hand abhor
 The cunning heart ; be fraud unknown —
 The arts of chance — the art of war !

Bless each true workman and his toil,
 In lonely room, or noisy mart,
 By morning beam, or midnight oil,
 Who honors Heaven in honoring Art.

The President announced the first regular sentiment, as follows : —

Our Seventeenth Triennial Festival, — We commemorate the occasion, with a deep sense of gratitude to the founders of our Association.

There was no response to this, and the second regular sentiment was announced : —

The President of the United States. Music — “ Hail Columbia.”

The third regular sentiment : —

Our Good Old Commonwealth, — To science and the mechanic arts a kind and cherishing mother.

The President said that, as they could not have the old lady *in propria persona*, she had sent his Excellency to represent her, and he introduced Gov. Gardner.

SPEECH OF GOV. GARDNER.

His Excellency upon rising was loudly applauded, and spoke substantially as follows:—

MR. PRESIDENT, LADIES AND GENTLEMEN:— Our good old Commonwealth is properly remembered thus early in your list of sentiments. She is proverbially proud of the mechanical skill of her artizans, and for generations has she exhibited her interest in their welfare by enactments for their benefit, and legislation to promote their interests. They, too, have ever evinced their participation in her renown and their intimately blended interest in her prosperity and good repute, by the superiority their skill has imparted to her products, by their inventive industry, their high personal integrity, their lives of usefulness, and, in days gone by, by their heroic deaths.

Should I be called upon to designate a fair specimen of all that is noble in the character of Massachusetts, of all that we can boastingly turn to and feel proud of as a state, whether it be the bounteous products of her soil, the beauty of her daughters, or the steadiness of purpose so peculiar to New England character, and the cultivated industry that is so honored in her sons, perhaps I could select no truer symbol, no happier type, than the scene before me. (Cheers.)

Where could a sample of true nobleness of character, of untiring industry and energy, or of any of the traits which so especially mark the busy minds of our honored state, more naturally or more properly be found than at the festivities of the Massachusetts Charitable Mechanic Association? It is to pay just homage to that portion of her sons, from whom she has long had shed such lustre upon the written annals of the past, and the living pages of the present, that I am rejoiced to arise in response to this sentiment.

The industry of our mechanics has covered the face of Massachusetts with thriving villages and teeming cities; it has

built our ships, which are specking every sea ; it has laid down and supports the railways which are woven over our state like a spider's web ; it has thrown solid walls across every stream, to exact its tribute upon the mill wheel ere it is permitted to resume its wonted course to its ocean home ; it has erected the giant manufactories, which, while furnishing clothing for the antipodes, at the same time provide markets for her agricultural products, and give occupation to her sons and daughters.

The industry of our mechanics, too, has by its consequences created many a happy home, furnished the amenities and luxuries of life to thousands of households, planted our fields, filled our gardens with annual beauty, stored our libraries, built our school-houses, and erected our churches. It has furnished the basis from which has flowed that constant stream of munificent charity which blesses both the giver and receiver ; it has planted the colossal fortunes which have founded our hospitals, and our benevolent and charitable institutions. Yes, Mr. President, should I affirm that the whole face of Massachusetts was changed by the industry and intelligence of her mechanics, I feel that I should say nothing but what in my judgment could be substantiated. Every great improvement of our agriculture, our commerce, or our manufactures, the three chief material elements of the prosperity of any community, can be traced primarily to the inventive genius or unflagging industry of mechanic skill. The successive gradations of progress from the days of the Indians to this our era of wonderful results, the startling advance in science and arts which almost every week witnesses with us, are spoken into being by this "sesame."

But while everything else has changed with magical rapidity since we became a nation, in one thing there is, there can be, no change, no progress, and that is in the incorruptible patriotism of the mechanics who compose your Association. (Great applause.)

All else may change, and may improve, but that love of country, its institutions, its freedom and its history can never die in the hearts of the descendants of those illustrious men who founded your time honored institution. Invoking their memory as an example for you and for all, I resume my seat with thanks for the kindness with which you have received me and which I shall ever remember. (Renewed applause.)

Fourth regular sentiment, —

Our venerable Honorary Member, Josiah Quincy, Sen.,—The active usefulness of his life is more honorable than the laurel crown of a conqueror. (Great applause.)

The President said he regretted exceedingly the absence of Mr. Quincy, and would read the following letter, which had been received from him: —

MESSRS. JOSEPH M. WIGHTMAN, L. MILES STANDISH, OSMYN BREWSTER,
THACHER BEAL, AND JOSEPH BATES :

Gentlemen : — I respectfully acknowledge the invitation of the government of the Massachusetts Charitable Mechanic Association, to be present at their eighteenth triennial festival, and extremely regret that my period of life compels me to decline the proffered honor. I do not, on this account, feel a less interest in the occasion. Paul Revere, Thomas Dawes, Benjamin Russell, and the other founders of your Association were my friends in youth and manhood. Their memories are dear to me in old age, from their private virtues and their public spirit. The seeds of American independence were scattered by no hands more liberally or wisely than by those of the mechanics of Boston. I rejoice that the spirit which characterizes the founders of your Association survives, and still actuates their successors.

I offer the following sentiment : —

The Mechanics of Boston, — They were among the first to aid the rising of the sun of American freedom ; they will be among the last to aid in perpetuating any spot which prevents its blessings from being universal.

I am, gentlemen, with great respect, your obedient servant,

JOSIAH QUINCY.

Quincy, 12th October, 1857.

The President said that, in the absence of the *oldest* Honorary Member, he would call upon the *youngest* Honorary Member of the Association, one whose talents commanded the highest esteem of the Association and of his fellow citizens. He then introduced Hon. George S. Hillard.

Mr. Hillard (who was upon the floor of the hall) rose and was received with applause. He said that this was an unexpected blow. Having an engagement in the early part of the evening, he had well hoped that in the obscurity of the lower hall he might have escaped. He had in some degree enjoyed this entertainment from that confident expectation; for he held that no man can heartily enjoy any entertainment when he has in the background the prospect of making a speech. It had been his fortune, in recently compiling sundry school books, to be obliged to examine much of the common-place literature found in such works thirty or forty years ago. Among these was the old story of Dionysius and Damocles; and it seemed to him very absurd that a man should sit down to a meal with a drawn sword hanging over his head, supported only by a single thread. He thought this was a mythical narrative, covering a moral truth, in the form of an invented narration. He thought that Damocles must have been a lawyer of Syracuse, who was occasionally invited to dine with his master, Dionysius; and that, on one occasion, he was asked to a dinner at which a numerous company of ladies and gentlemen were assembled, and Dionysius said to him, "About half past seven o'clock I shall want you to make a speech." That was the meaning of the sword which hung so imminently over his head. (Laughter.) That made the wines all flat and the viands all tasteless. Was not this a true interpretation of the legend? (Laughter.)

He came there mainly to thank the Society for the honor bestowed upon him by making him an Honorary Member. He could hardly feel that it was deserved. He was not a mechanic; his hands had no cunning in the business which they followed;

he only labored with the tongue and the pen, and of the products of his work they were to judge, and not he.

They were not only a Mechanic Association, but a Charitable Association, and from that fact the great value of it arises. There will be occasion, almost unprecedented, during the coming winter, for calling into exercise the spirit of mutual help upon which the society mainly rests. We are living in trying times. We see around us ruins of fortunes and ruins of hopes, and may draw serious lessons. They were working men, and he, too, was a working man, and they had probably felt, as he had sometimes felt, dissatisfied with modest gains and a decent subsistence. Times like these rebuke such a feeling.

This coming winter is to be a winter of bitter privation. Corporations and individuals are forced to turn away their workmen, and it was the saddest thing connected with the present crisis, to him, to read in the papers statements that hundreds of men and women are daily turned out of employment, with no prospect of getting any during the winter. God help them and their children!

Let this Association remember the spirit of charity, and brotherly love, and kindness; and from their moderate means give generously to those upon whom the burthen of these times rests more heavily than upon any of us, and thus vindicate the noble name, "Massachusetts *Charitable* Mechanic Association." (Applause.)

Fifth regular sentiment,—

The Congress of the United States,—May the members imitate the patriotism of its earliest statesmen, and by wise laws secure national prosperity at home, and honor and respect abroad.

Hon. Linus B. Comins, M. C., of Roxbury, responded. After a brief introductory of a personal nature, he proceeded to speak of the labors of the Massachusetts delegation in Congress. Passing from this he complimented the Association for the usefulness of which it was the origin — its art,

industry, humanity. The names of Kane, Agassiz and other sons of science and industry were alluded to in this connection. Those men were all truly working men. Whoever developed the resources of the country to its improvement, whether artisan or scholar, deserved the respect of the Massachusetts Charitable Mechanic Association.

Sixth regular sentiment,—

Our Honorary Member, Robert C. Winthrop,—The brilliancy of his own talents adds lustre to records of a noble ancestry. (Great applause.)

The President read the following letter from Mr. Winthrop, who had been obliged to leave the hall in consequence of imperative engagements:—

WEDNESDAY AFTERNOON, Oct. 14, 1857.

Joseph M. Wightman, Esq., Pres't M. C. M. A. :

My dear Sir,—I deeply regret that an early engagement for this evening, from which I cannot escape, will prevent my remaining long enough at your festival to enjoy the eloquence of others, or even to throw in my own little word of congratulation and compliment. I have so often had the good fortune to be present at your hospitable board, as one of your Honorary Members, that I know well how much I shall lose by leaving you so soon. It is no common privilege to dine in Faneuil Hall, with an Association which combines so many warm hearts with so many strong hands, and which displays, not merely on its banner, but in the daily life of so many of its members, the uplifted right arm of honest and useful labor, wielding its implements under the influence of your noble motto, "BE JUST AND FEAR NOT."

Your table, too, will be adorned with the presence of not a few of those who lend the highest grace to every scene of life, and who always delight to decorate an occasion in which the cause of Charity and Benevolence is blended with that of Industry and Art.

It is this *Charitable* element of your Association, let me say, which must be contemplated by us all with peculiar interest at the present moment,—when the commercial and industrial pursuits of our country are surrounded by so many discouragements; and I cannot forbear taking

it as the subject of the sentiment with which I venture to conclude this hasty note of apology and regret.

Believe me, dear sir, with best wishes for the welfare of the brethren individually and collectively,

Very faithfully, your friend and servant,

ROBERT C. WINTHROP.

The Massachusetts Charitable Mechanic Association,—No financial reverses can impair its stability, while it is cemented together by that CHARITY which never *faileth*.

The following song, was then sung by the Glee Club:

S O N G .

BY WILLIAM WINTER, ESQ., OF CAMBRIDGE.

Air—“*BONNIE DOON.*”

Above us bends the broad blue sky,
Beneath it rolls the fertile earth ;
Sun, moon and stars shine out on high,
As grand as at creation's birth ;
For us the elements are blent,
By Wisdom given to our control ;
While, true to one divine event,
Moves on the glorious human soul.

Around us are by day and night
The glories of the earth and sky ;
Within us burns a quenchless light —
A heavenly life that cannot die ;
Those are the tokens God has given
Of beauty to our vision dim ;
And this a spirit sent from heaven
To light our pathway up to him.

Be ours the noble task to make
A happier world for all mankind ;
Dispel the mists of doubt, and break
The fetters of the human mind :
'Til, over every toiling race,
The sacred sun of knowledge shine,
Diffusing order, perfect grace,
Celestial light and love divine.

The President said they were honored to-night by the presence of a gentleman known and honored throughout the country, though heretofore a stranger to the festivities of our Association. He would introduce him by the following sentiment:

Our Country,—Glorious for its science, glorious for its arts, and still more glorious for its public men.

The introduction of Hon. Caleb Cushing was the signal for hearty enthusiasm.

SPEECH OF HON. CALEB CUSHING.

MR. PRESIDENT,—I know not whether it be fitting, whether it be not presumptive in me, even at your call, to respond to such a sentiment. In this venerable hall,—consecrated by the memories of eloquence and patriotism in the New World as never yet was temple or cathedral by the rites of religion in the Old World,—in this consecrated hall, when the public men of our country are but mentioned, it seems to us that its old walls become instinct with the spirit of life, that the voices of the mighty dead ring in the ear to the solemn echoes of its vaulted roof, and that the great figures of those proclaimed rebels of the Revolution,—John Adams, Samuel Adams, John Hancock, Thomas Cushing, Paul Revere,—and of the departed statesmen of a later generation, Quincy, Adams, Otis, Ames, Story, Webster, bright names on the roll of honor,—arise in visible procession before us, to bear witness to the glories of the public men of this Commonwealth and of the American Union; and that here “expressive silence” may muse their praise more eloquently than lips of living man.

But “Our Country,” with its science and its art, its moral and material greatness and glory,—our country is cherished by all its sons, even amid their occasional complaints of its

public policy, of its laws, and of one another; it demands and receives our filial reverence and admiration in the times of its prosperity, and in those of its adversity our devotion, to the last drop of blood which beats in our hearts; and of the glories of our common country, the united thirty-two States, not a part, but each and all of them,—who may not and will not speak?

Our country, in its material interests, stands on the stable tripod of agriculture, art, and commerce. Its natural productions of land and sea, its pastures, forests and cultivated fields, its mines, and its fisheries, constitute the primary element of its wealth and strength. Science and art come next, the inventive thought, the all-conquering labor, applied to the cultivation and exploration of natural products, and to the modification of them for the convenience and use of man: whether in the production and preparation of animal substances for his food, shelter, or clothing,—in the skill which shapes the metal and the wood, the fibre of cotton or wool, into such diversified objects of manufacture,—which elaborates matter as with a creator's hand, from the fabrication of a pin to the elevation of a palace or a pyramid,—which launches the ship on the sea,—which builds the steam engine, the railway, and the telegraph,—or which embodies the inspirations of genius in the sublime and beautiful forms of painting, sculpture and architecture. And then comes commerce to connect all these things, to exchange them, to traverse earth and sea, river and lake, transporting the fruits of industry and art from one state to another, and from nation to nation, under the safeguard of the constitutional power of the Union. In the harmonious combination of all these interests, in their consentaneous development and parallel advancement, I repeat, consists the industrial prosperity of our country.

We cannot fail to reflect on this,—it is impossible not to see it,—and in the presence of that great commercial revul-

sion, and, with it, cessation of manufactures, and decline of the products of agriculture, which for the moment pervades the United States.

We have before us the spectacle,—the unique and extraordinary spectacle,—of the gallant vessel of our domestic credit system going down, down into the ocean depths, without any storm of public calamity to cause it, with sails set, pennons streaming to auspicious breezes, and floating along as fair and smooth a sea as ever rippled and glittered to the sunlight on the bright shores of the Cyclades. All domestic commerce is paralyzed;—the ship-yards of Boston and Newburyport are deserted, the mills of Lowell, Lawrence and Holyoke are at a stand, the busy hum of labor no longer fills the workshops of Worcester and Springfield, and a winter of labor unemployed appears to be settling down like a dark cloud on the industry of Massachusetts. That,—the multitude of persons deprived of employment,—is the grave, the sorrowful, the alarming aspect of things, which is of peculiar and paramount interest to us all, at the present crisis. What are we to do, is the universal question, to avert evil, to diminish suffering, to restore the usual course of affairs? Permit me, Mr. President, not so much to attempt to answer exhaustively this general question, as to make two or three pertinent suggestions on the subject, with special reference to objects naturally suggested by the exhibition of this great and useful Association.

To begin, I apprehend that a little too much stress may be laid, for the time, on the duty of retrenchment and economy, or, at least, that the admonitions on that subject are somewhat more indiscriminate and comprehensive than is called for by the exigencies of the occasion or the public good. Certainly, every prudent man should live within his income, with due regard to economy for the future needs of himself and his family. That is not an obligation of this day only, but of all days. I doubt whether, in the palmiest hours of

past prosperity, it has been neglected by us, any more than universally happens, in all human society, in the same circumstances. It is to be remembered that the natural resources of this country, and the consequent relative results of industry in it are enormous—beyond those of any other part of the world; that no such impediments to successful industry exist here as elsewhere; that we are exempt from national famines, exhausting wars, and the capricious extravagances of regal or imperial despotism; and that hence, as a general rule, there is more of wide-spread and universally diffused competency among us than in most other countries, and more of consequent capacity to live well, dress well, build well, and participate freely in all the material comforts of civilization. That is the distinctive fact in the condition of the United States. To what end all its advantages, if they may not be enjoyed by us, in temperance and in reason? In seeking to better our condition, and to enjoy its fruits, we do but yield to irresponsible instincts of the beautiful and the good in our nature, and so worthily respond to the bounteousness of God.

I doubt, therefore, at any rate, in the breadth of its ordinary statement, the truth of the current doctrine of assumed profusion of living as the evil of the times, or contrasted retrenchment as its remedy. I think both the evil itself and its remedy lie deeper in other causes and acts, which it would be out of place to attempt to unfold here at the festive board.

For example, it is quite common to assail the ladies, and to ridicule and reproach their taste of dress, personal ornament, and custom of life, as one of the responsible causes of the present commercial crisis. I utterly deny this. I would like to break a lance with any gentlemen in that quarrel. I will go further, and run the risk of paradox, in saying that in my judgment the prevailing female costume is not only graceful, but, relatively to other fashions which have preceded

it, convenient, and therefore justified by considerations of utility as well as beauty. Apart from that, I confess I have been amused to observe how much of undue importance, in the great sum of our wealth, industry and commerce, has been attributed to the extra flounces and furbelows of the ladies. It is in truth a matter which enters for a mere bagatelle into the complex question of imports and exports, and that is all. Did the silks worn by the ladies produce the failure of the Ohio Life and Trust Company? Did their superfluous laces and muslins break down the Illinois Central Railroad? Did their voluminous skirts stop the wheels of the Erie Railroad? Was it a fancy of theirs for cakes and sweetmeats, which raised up, or pulled down, the speculative prices of sugar and flour in the United States? Was it their kid gloves and Lilliputian bonnets and slippers, which occasioned the embarrassment of the great dry goods commission houses of Boston, and the suspension of the banks of Philadelphia and New York? Absurd! (Cheers.)

I confess it shames me, as a man, to hear so much said of the profuseness of the ladies, in view of our own way of life. Most assuredly, Mr. Fitz Frivol, with his champagne, his cigars, his fast horses, his yachts, and his other fancy pastimes, has no right to complain of the fine robes, the brodered kerchiefs, and the *bijouterie* of Miss Flora McFlimsey. She will discover that she is in want of nothing to wear quite as soon as he will find anything useful to do; for even she has a warm woman's heart beneath all the point lace and moire antique in whose mysterious volume her fair form is draped; and if he did but know how to reach that heart, he would see her as prompt to please by frugality as by luxury, and proud to make any sacrifice of fashion at the voice of duty and of love.

But all the follies of all the Fitz Frivols and Flora McFlimseys in the land are as nothing, in effect, on the financial condition of the United States, compared, I will not say with a war in the Crimea or in India, for that we do not and

cannot have, — but as compared with a few cents per pound or yard of rise and fall in the price of the cotton of Carolina, the corn and wheat of Illinois, or the freights and manufactures of Massachusetts; and their follies have had no appreciable influence in producing the actual break-down of the credit system of the United States.

At such a time as this, at any rate, when so many thousands of industrious men and women in Massachusetts are deprived of occupation and of means of support, by the curtailment or suspension of work in the great manufactories of the state, although for them retrenchment is a necessity as well as duty, yet it is not so for those, who, with wealth, possess assured means of subsistence. Why should they retrench, when every article they consume is of diminished price? It would be especially unwise for them to do so, at a time when every item of personal expenditure which they may cut off will but serve to aggravate existing evils, by contributing to impede the circulation of money, by increasing the superabundance of unemployed labor, and by multiplying the causes of poverty and crime, and in the long run subject them to larger expenditures of almsgiving and taxation.

At a time like this, in France, for instance, there would be succor to labor by great public works of the Government, such as the addition of a new quadrangle to the Louvre or the Tuilleries. We cannot in this way combat the effects of a stricture, as it is called, in the money market. But we can, so far as we possess the means, continue our accustomed train of life; persevere in well-devised and well-directed enterprises; keep, so far as possible, our ships and our looms in action; preserve unmoved the great landmarks of our industrial prosperity; and stand ready to start anew, when the proper time comes, as come it soon must, all the great movements of production and of commerce throughout the Commonwealth. (Applause.)

I say, in the first place, to Europe, and especially to Eng-

land, — England, sometimes fretting at us with little cause, and sometimes fretted at by us, but always nearest to us in relations of commerce as well as of blood, — I say to England, — do not suffer yourself to be deluded by the habit which prevails in the United States, of monstrously exaggerating all the transitory troubles, political and financial, which, from time to time, in the vivaciousness of our nationality, flit across its face like shadows and so depart. The United States are not, like noble but unfortunate Spain, — borne down by the accumulated load of successive ages of domestic or foreign war — another “Niobe of nations,” mourning over the irreparable loss of the Netherlands, of Italy, and the Indies. Our young strength is able to throw off at will its maladies, either of atony or fever, by mere force of constitution. Nor is the people of the United States like that of Mexico, reduced to imbecility and to anarchy, by admixture of the inferior blood of emancipated Africans or Indian races, so as to lie down in the despair of helpless poverty on the very silver rocks of Guanajuato and Zacatecas. Not in our hands will California hold its golden stores shut up in the unexplored treasure-chambers of the Sierra Nevada. I repeat, be not deluded into the imagination that a blight has fallen upon this country, as you mistakenly supposed at a former time, when payments did not punctually arrive on the bonds of Pennsylvania.

I say, in the second place, to the many good, honorable and honored merchants and others of the United States, who have been doomed to see the commercial credit of a long life time fail on the instant, and the great and useful undertakings conducted by them, and on which the happiness of thousands of their fellow men depended, arrested or crushed, — I say to them, You have the cordial sympathy, the unimpaired, nay, the augmented respect of your fellow citizens. You, the great merchants, manufacturers, publishers, and bankers of Philadelphia, New York and Boston, are embarrassed; not by

reason of special faults of yours, but of the inherent defects of the system of trade and banking, and the mismanagement of that system at the great centre of the commerce and exchanges of the United States. You are the martyrs of the principle of commercial honor. You have fallen, only because you stood in the front, and thus against you were struck the wild blows of our credit system struggling in its death agony. Be of good cheer. You need not say with Francis at Pavia, *Tout est perdu fors l'honneur*,* — but rather, that nothing is lost, now you retain untarnished honor. (Great Applause.)

Finally, to those who have weathered the gale in safety, I say, let no narrowly and timidly selfish calculations govern your conduct; if straitened by temporary privation of labor, be prudent, be temperate, be patiently hopeful of speedily returning prosperity; for the productive resources of the country, its agriculture, its mineral wealth, its commercial advantages, the strength and skill of its inhabitants, — all these are unscathed and untouched by the storm. If wealthy, show that wealth has its courage, not less than its fears. Long enough have we recently been trying in this country to see how much and how causelessly we could hate one another. Let us change all that to a policy, I ought rather to say, to a religion, of reciprocal support and love. Let not those of less favored worldly condition among us have cause to murmur at the unequal dispensation of the blessings of Providence. I well know, indeed, that the charity of Massachusetts is open-handed, bounteous, inexhaustible.

There is no winter in't: an autumn 'tis,
That grows the more by reaping.

For the sorrows and sufferings of the poor, in the inclement season which is near at hand, let us all be prepared, and each, in our respective spheres of action, emulate the high example

* "All is lost, except honor."

and practice the holy uses of this the "Charitable Mechanic Association."

Prolonged cheers testified to the enthusiasm with which the eloquent remarks of Mr. Cushing were received.

The next regular sentiment was evidently fully appreciated by the audience, who received it with great applause :

The City of Boston, — Proud of her ships and of her commerce, she is willing to export anything but her *Rice*.

His Honor, Mayor Rice, expressed the pleasure which it gave him to come from the darkness without to the brightness within ; from the dark faces of the merchants to the smiling countenances of the company assembled here. He complimented the President, who brought the same energy and fidelity to his duties here, that he bestowed upon his labors elsewhere. He spoke with pride of the cultivation of the mechanic arts in Boston, which can never be wholly overthrown, and which will tend to restore us to our former prosperity. We have lost some money, but no courage, and with our courage we have retained our mercantile and our personal honor. So long as Massachusetts retains these she can really lack nothing that is essential to her success. We have not that long drawn industry that is common in other countries, because it is foreign to our genius. In this connection he alluded to the mighty energy of our business enterprise, which has made us what we are, and which will sustain us in the future. He also expressed commiseration for those who were or might be suffering by the calamity of the day, and urged all who could give employment to industry, art and labor to do so.

The President then paid an eloquent tribute to the past Presidents of the Association, and introduced Hon. Joseph T. Buckingham, by the following, which excited great enthusiasm :

Our Past Presidents, — The present prosperity of our Association is an evidence of the wisdom and fidelity of their official career.

Mr. Buckingham commenced by regretting his inability to do justice to the sentiment, but as he proceeded to relate the interesting personal reminiscences of the former Presidents of the Association, with which his mind was stored, he was listened to with the closest attention. He paid a feeling tribute to the memory of Hunnewell, Russell, Cotton, Messenger and Armstrong, who had preceded him in the presidential chair, and closed with a beautiful and appropriate sentiment in regard to their career and example.

The next sentiment was —

The Press—The Archimedean lever that moves the civilized world.

The President proceeded to introduce Hon. Richard Frothingham, Jr., to respond, when he was informed that Mr. Frothingham had left the hall, upon which the President stated that the sentiment would be responded to by a worthy representative, and announced the singing of the following

O D E ,

WRITTEN FOR THE SEVENTEENTH FESTIVAL.

BY B. F. SHILLABEE, ESQ.

With heart and voice we greet the hour
 That brings us here in joy together ;
 Let no portentous shadow lower,
 To mar our genial festal weather ;
 Where soul to soul its bliss imparts,
 And woman's smile is beaming by us,
 We'll fling life's burdens from our hearts,
 Nor leave its vexing ills to try us.

The hours move on in pleasant way
 When social converse meets their going,
 And fleet the healthful pulses play
 When the full stream of joy is flowing ;

The cheerful word, the mirthful laugh,
 The song that melody dispenses,
 Are but Care's jolly epitaph,
 Who dies despite his grim defences.

We bless the memory of the Past,
 Bright with the fame of many a brother,
 Who round her honored brow has cast
 A wreath for Art—our common mother ;
 And from the land and from the main
 Their mighty spirits hover o'er us,
 To mingle with our mirth again,
 And breathe the incense of our chorus.

No aching head, from vinous draught,
 Attends our exhilaration ;
 The wine to-night that we have quaffed
 Is woman's better inspiration :
 And in the feeling it imparts
 We pledge the toast above all others ;
 The *dear ones* nearest to our hearts,
 The Art that binds us all as brothers.

The next sentiment was —

The Merchants of Boston — In their prosperity we rejoice — in their reverses we sympathize.

Charles G. Nazro, Esq., responded. He alluded in a happy manner to the common bond which binds Commerce and the Arts together. He complimented the Association upon their prosperity and objects, in which all our citizens felt a deep interest, and trusted that their success would continue as the meritorious position of the Association deserved.

To the next sentiment,

The Legislature of Massachusetts — May its voice ever be guided by true patriotism, and its action be a triumph of constitutional principles.

Hon. Charles A. Phelps responded. He said it gave him great pleasure to unite in a festival of labor, and in no place more than Faneuil Hall — the work of the hands of the me-

chanics of Boston. The law of work, of labor, he continued, was written on all the institutions of man; and in all the scenes and operations of nature — everywhere was written the law of work, work, work. These spires and domes, these warehouses, these ships were the product of the mechanics, of which this institution was the foundation.

It was from the common schools, ay, the workshop of the mechanic, that the occupant of a high post in the hall of Congress had been called. The speaker then pictured the possibilities of the future in the discoveries of art and science, and closed with a neat allusion to the occasion and the Association.

The following Ode, written for the occasion by George Coolidge, Esq., was then sung.

O D E .

BY GEORGE COOLIDGE.

"The heaven, even the heavens, are the Lord's; but the Earth hath He given to the children of men."—*Psalms* 115: v. 16.

Worlds countless, viewless as the globules frail
That shape the ocean in her secret bowers,—
One sea of light,—in endless space prevail :
ONE WORLD is ours !

One Presence infinite o'er all presides :
One fiat unto all its meed ordains ;
One sovereign pleasure for the least provides,—
OUR world sustains.

In all we know we trace the Power Divine,
In all we are His purposes discern :
The LAW is rendered,—" LIBERTY is thine,
O man, to earn ?"

Toil ! contest ! triumph !—these the chosen way
The priceless treasures of the blest to share !
Truth, Justice, Love, their everlasting sway
To all declare.

What doeth Man, with all his high estate,—
 Earth and its laws, its substance, its design,—
 Endowed with majesty to govern Fate
 With powers divine ?

The Past its storied pages opens wide
 With lessons of demoniac lust and blood !—
 They sealed of heaven who braved the raging tide
 To turn its flood.

Ages to come to ages vanished haste,
 On bearing nations struggling and convulsed ;
 In lengthening tracks of woe their weary waste
 Lies, heaven repulsed.

Yet in the human spirit deep and sure
 A latent virtue shall evolve the right ;
 Love, Truth, and Peace shall rise and beam secure
 On human sight !

Sweet ministries of charity and grace,
 That herald on the universal joy,
 Are of the true and brave who love their race
 The blest employ.

With every living soul there is a tie
 Outstretching to the trackless verge of Heaven ;
 To every voiceless prayer, or tender sigh,
 Is language given.

On coils divinely wrought, that may not part,
 Ascend the spirit messages of thought ;
 And answering cometh to the listening heart,
 “ BE JUST !—FEAR NOT ! ”

After the Ode was sung, the President said that to the last sentiment he could not consistently select any *one* gentleman present to respond, as *all* would undoubtedly be most happy to be called upon. To gratify them as much as possible, under these embarrassing circumstances, he would ask for the only response which could be generally given, that by

their hands. He then announced the following as the closing sentiment.

Woman—The stockholders of the Bank of Affection. Their *bills* are always received with pleasure, without regard to their embarrassment.

This was responded to by the hearty applause of the gentlemen present.

A benediction, by Rev. Chandler Robbins, then, at half past 9 o'clock, closed the festivities of the evening.

The festival passed off with the happiest success, and reflects the highest honor upon the Association under whose auspices it was conceived.

The platform, on which were seated the invited guests, was graced with more than a usual display of men of talent, and the speeches were generally of a high order of merit.

Massachusetts Charitable Mechanic Association.

At a meeting of the Committee of Arrangements for the Seventeenth Triennial Festival, the following votes were adopted :—

Voted, That our thanks be presented to our President, MR. JOSEPH M. WIGHTMAN, for his highly interesting Address delivered at the Seventeenth Triennial Festival, at Faneuil Hall, and that MESSRS. L. MILES STANDISH, OSMYN BREWSTER and JOSEPH L. BATES be a Committee to request a copy for publication.

Voted, That the President and Secretary be a Committee to prepare an account of the Festival, with the Addresses delivered on the occasion, and to superintend its printing and publication in a pamphlet form.

OFFICERS OF THE ASSOCIATION.

1857.

PRESIDENT.

JOSEPH M. WIGHTMAN.

VICE PRESIDENT.

L. MILES STANDISH.

TREASURER.

OSMYN BREWSTER.

SECRETARY.

JOSEPH L. BATES.

TRUSTEES.

OTIS TUFTS,
ISAAC H. HAZLETON,
BENJAMIN BRADLEY,
HOLMES HINKLEY,
THACHER BEAL,
SIMON G. CHEEVER,

THEOPHILUS BURR,
SAMUEL D. BATES,
MOSES HUNT,
SAMUEL H. NEWMAN,
THOMAS LYFORD,
JONATHAN PIERCE.

MARSHALS AT THE FESTIVAL.

JAMES A. WHITE, *Chief Marshal,*

LUCIUS A. BIGELOW,
GEORGE H. CHICKERING,
HENRY GUILD,
CHARLES F. AUSTIN,
THEOPHILUS BURR, JR.,

WILLIAM MARBLE,
WM. RALPH EMERSON,
SAMUEL T. CROSBY,
HENRY A. LYFORD,
S. S. WOODCOCK.

131
THE MECHANIC ARTS FAVORABLE TO LIBERTY AND
SOCIAL PROGRESS.

A D D R E S S

THE NEW YORK
PUBLIC LIBRARY
P 39207
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1899.

BEFORE THE

Massachusetts Charitable Mechanic
Association,

AT THEIR

TENTH EXHIBITION,

SEPTEMBER 20, 1865.

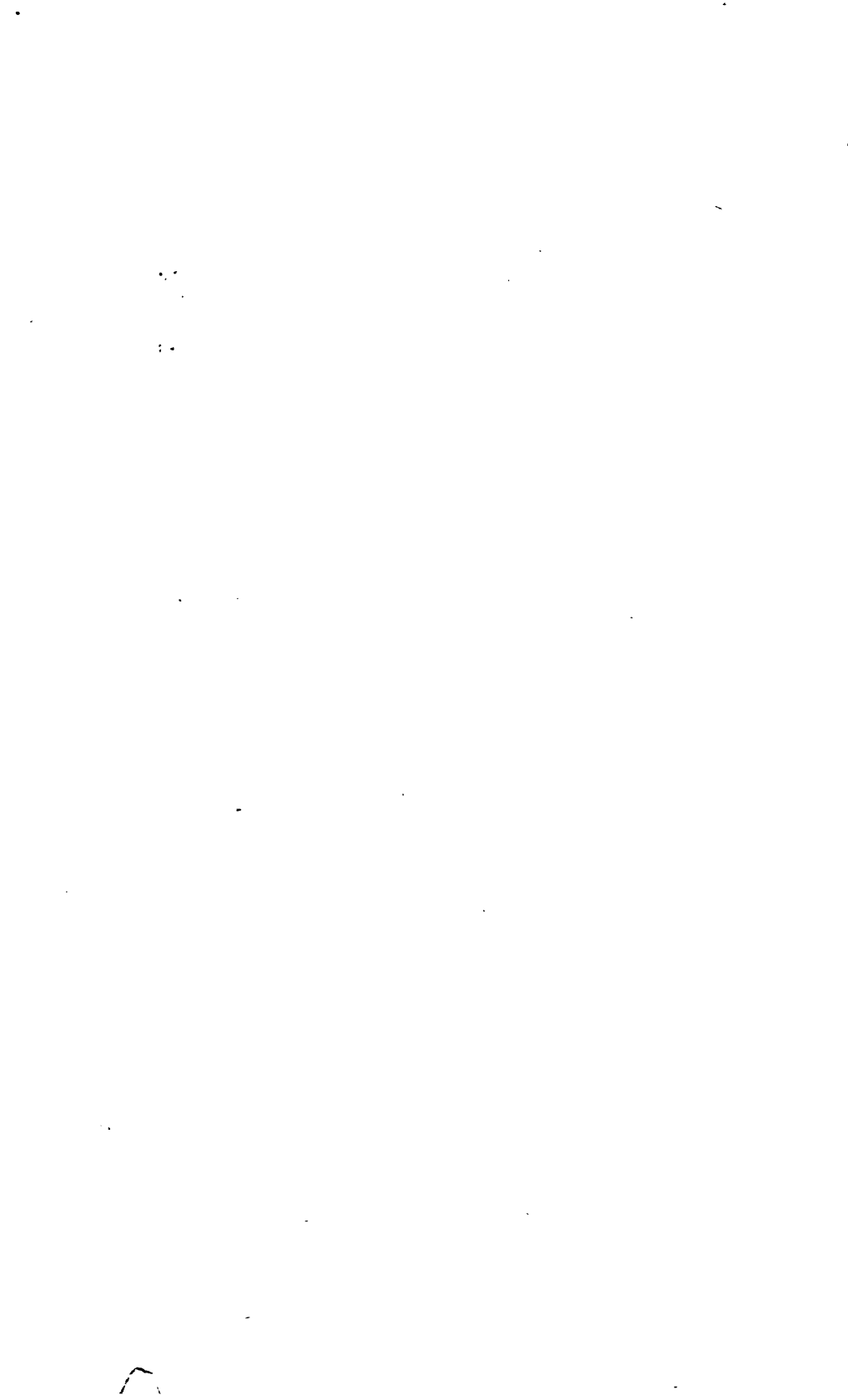
By ALEXANDER H. BULLOCK.

2 MASS. HIST. SOC.

BOSTON:

WRIGHT & POTTER, PRINTERS, No. 4 SPRING LANE.

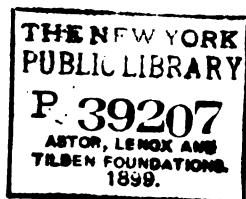
1865.



The Mechanic Arts Favorable to Liberty and Social Progress.

A D D R E S S

BEFORE THE



Massachusetts Charitable Mechanic
ASSOCIATION,

AT THEIR

TENTH EXHIBITION,

SEPTEMBER 20, 1865.

By ALEXANDER H. BULLOCK.

B O S T O N :

WRIGHT & POTTER, PRINTERS, No. 4 SPRING LANE.

1865.

P 2 .

200

100

Boston, October 5, 1865.

HON. A. H. BULLOCK:

Sir: At a meeting of the Government of the Massachusetts Charitable Mechanic Association, holden this day, it was unanimously voted that the thanks of the Association be tendered to you for your eloquent and appropriate Address, delivered before the Association.

It was also voted that a copy be requested for publication.

JOSEPH T. BAILEY.
W. W. CLAPP, JR.
A. J. WRIGHT.

WORCESTER, October 7, 1865.

Gentlemen: I have the honor to acknowledge the receipt of your favor of the 5th instant, apprising me of the vote of the Government of the Massachusetts Charitable Mechanic Association, and the request for a copy of my Address for publication.

I herewith send a copy, and will only add that I feel highly honored by this expression of their approval.

I remain, yours very truly,

ALEXANDER H. BULLOCK.

MESSRS. JOS. T. BAILEY,
W. W. CLAPP, JR.,
A. J. WRIGHT,
Committee, &c., &c.

ADDRESS.

MR. PRESIDENT AND GENTLEMEN :—

I congratulate the members of the Massachusetts Charitable Mechanic Association that with the return of peace the opportunity for resuming their periodical exhibition is restored under circumstances so gratifying. While the war lasted your seasons of ovation to the useful arts were indeed suspended amid the pathos and pageantry of arms ; but the arts themselves suffered little abatement ; rather they took from the excitations of the time new intensity to themselves, and repeated the lesson taught by other countries, that war periods are quite apt to quicken and invigorate the national genius. Accordingly, while the late conflict was raging, and all classes, all interests, all well-fares were to some extent swept into its vortex, the records of the Patent Office prove that the inventive wits of the country kept steadily at their work under the highest tension, and the income list demonstrates, what we all knew before from our personal observation, that the mechanic arts and manufactures were reaping a golden harvest. Nay, even more than this, and pertaining to the rationale of our military success, these creative and constructive forces had not only prepared the free States for the war when it came, but they became themselves the nerves and sinews of the treasury which shares with the soldier the honors of victory. The glistening collection of ordnance which is parked in yonder hall,—let us hope not soon to be needed in the field,—derives its highest interest and largest

instruction from the bright array of its peaceful companionship, the engines, the fabrics, the textiles, which almost seem conscious of their sovereignty amid martial implements and martial deeds.

But now it is that the war having subsided the arts assume once more their control in the State and sway all the classes and all the employments of men. We are soon to be *in statu quo ante bellum*,—a generation pushing the originalities of motive power and the artificial combinations of forces to the farthest verge of empire. This is an age and ours a country of mechanism. The mechanical arts, with which for all purposes of discussion manufactures are synonymous, bear the rule in our time. The prizes of fortune, which formerly fell almost exclusively to commerce, now alight more frequently here; and without these agencies agriculture would never have awakened from the sleep of the earlier periods. The institutions of education, without abandoning the classic fields, recognize and apply this fact; and Boston, as much a city of mechanics as of merchants, through her Lawrences, father and son, and more recently her Hooper, has conferred upon the neighboring university new and practical departments of contemporary power and lasting beneficence. And so I take up the condition as we find it, and for these remaining moments will consider **THE RELATIONS OF THE MECHANIC ARTS WITH LIBERTY AND SOCIAL PROGRESS.**

No lesson of modern history has been more clearly defined than that the growth of these utilities has been the herald of a larger freedom than was before enjoyed. It is difficult indeed, —so imperfect have been historical writers in their delineation of domestic custom,—to point out the exact connection which one improvement after another has borne with the general results; but we cannot recur to the record of those days in which manufactures, and commerce, which would be of little consequence without them, first caught the influence of the pulsations which started the people of Europe from their torpor,

without becoming ourselves admiring witnesses of their quickening and regenerating effect upon the tyranny of a thousand preceding years. If we go back to what under our classification of periods is called the middle ages, we find that the institution of feudalism, half patriarchal and half military, held everything in subjection until artisanship, manufactures and trade loosed forever the chain and the grasp. The triumph at Runnymede, to which we are in the habit of referring the landmarks of freedom, was chiefly the success of feudal lords over a feudal crown; it brought but little of practical liberty to the nine-tenths of all, who still continued under a baronial despotism. It was not until the mechanic arts, few and small as they were, —manufactures, dawning faintly and at intervals in a long, dark period, dying out in one place only to take new life in another, —and commerce, depending upon these for its support, always sharing their fortunes, and keeping pace only with their progress,—had varied the broad dead level of the public condition, had liberalized the ranks above and quickened the masses below, had opened the way for the fusion of the social classes and penetrated their mutual relations with those aspirations which have beat higher and higher till now they control the Western nations,—that anything which can be called popular freedom had a genuine and transmitted existence. In the descent and diffusion of liberal ideas, in the promulgation of common rights, in the establishment of systems of justice and equity, towns and cities have proved to be the most effective agencies; but these have sprung up only in sympathy with manufactures and commerce. The mediæval landed proprietor conferred no such benefits upon the race; he held his artisans under the limitations of a quasi-white servitude, and for all the purposes of reforming social abuses and redeeming men from vassalage their relation was almost of as little value as that of the mechanics of Greece and Rome, who were slaves. If the annals of mankind chronicle anything with a point and a moral, it is that for centuries

there were no considerable and enduring manufactures which were popular in their origin, popular in their uses, and popular in their relations. I allow that among the memorials of early time, partly rescued and partly entombed beyond our knowledge, there are sublime traces of lost arts. Wonderful to this generation, marvels to the modern science of mechanics, they loom out from Nineveh, and Babylon, and Jerusalem, and Egyptian pyramids, and later cities, even now under the process of exhumation, full of interesting disclosure to the antiquary and the scholar; but bringing little instruction as to the advancement and enfranchisement of the world, and scarcely coming at all within the circuit of the golden links which in our day bind the productions of genius and art to the welfare of human kind. They are splendid encomiums upon the skill of the past; but they furnish not much aid to the progressive lessons of our political economy which builds up Boston, and Lowell, and Lawrence, and Worcester, and infuses them with the springs of immortal life. Such a benign mission was reserved to a later period of popular arts. Those were feudal times, having an abundance of rural life, protected by the castle, the turret, and the portcullis.

In classifying the periods and the causes of the deliverance of Europe, a philosophical historian (Mr. Hallam,) has ascribed one of the first degrees of progress to the introduction of woollen manufactures into Flanders, nearly six hundred years ago. So magical was the effect that the wings of trade opened wide and far, that little district became a market of renown, and merchants from seventeen kingdoms, beside strangers from almost unknown countries, were domiciled in the inconsiderable capital of West Flanders that palpitated under the new dispensation of industry. How infectious are these examples! They spread immediately through the free cities of Germany, and wherever the most mechanical skill and production was developed, there the greatest civil liberty was enjoyed. England

invoked the charm; and as if realizing the glory of the title which subsequent history has given to him, of the "father of English commerce,"—"a title by which he may claim more of the gratitude of his countrymen than as the hero of Crecy,"—her great Edward opened a stream of emigration from the manufacturers of the continent which continued to pour its life-giving influences into his realm for an hundred years afterwards. The commerce of the Baltic sprang into existence, and Northern and Southern Europe greeted each other for the first time in peace and on shipboard; ships of nearly a thousand tons astonished the god of the sea; maritime law and the law system of nations took form and expression; international comity and freedom rose to influence and respect; banks started into life, the repositories of so many hopes, and bills of exchange were invented, those fictitious cords which bind together remote nations in faith and confidence; the desolation of the wars of the roses was quickly repaired; manufactures and trade obtained a place in the statutes of Parliament, and from that day down they have swelled the volumes of its proceedings with the record of their fraternal progress, their equal beneficence, their indissoluble glory. Those who were engaged in these occupations became respectable before the law and began to assume an equality with the landed proprietor, for by a statute it was provided that an artisan or tradesman,—you will bear in mind that the two have travelled in company together on the same benevolent mission to the race and to its now conceded honors,—if possessed of real estate of the value of £500, should be permitted to dress himself like a squire of £100.

The struggle between arbitrary power and the rising classes was protracted in its duration and varied in its vicissitudes of success and defeat, but every generation brought it nearer to its termination. The hue of change was passing over the social condition, and the power of landholders was yielding to the free spirit of the towns. It was not in the tent, but in the workshop,

that modern liberty was dreaming of her coming joys ; it was not in Gothic halls, but in the marts of trade, that equality of rights was panting with a new-born consciousness ; it was not in rural but in urban life, in the smoke of cities, in the din of ports, that the reforms were maturing that should strike the century bells with the last note of the middle ages and awake mankind by the click and whirl and thunder of the arts to the amazing scenery which is now unfolding before us without exciting our surprise. There it was that new ideas of profit and of property, new conceptions of creative power and artistic combination, disturbed the stagnation of all previous time ; and it was there, in the consciousness of common strength, and invigorated by a more rapid circulation of thought, that the stubborn spirit of freedom first made its roots broadly and profoundly. The king became disquieted at the rapid increase of London ; but artisanship, trade and shipping found their way into Parliament. The democratical interest, distinguishing the orders of industry from the territorial aristocracy, was steadily diffusing itself and accumulating its power, running in even flood with ideas of equality and independence. Aided by the practical arts, it gained the first modern triumph ; for while in an earlier day Wat Tyler could only summon a powerless rabble around his standard, who fell easily before the knights in their armor of steel, Cromwell afterwards gathered his heroic numbers from the houses of mechanics and merchants, Puritans in their religion and workmen in their lives, and a new era was opened at Marston Moor.

The first conflict and the first victory of the arts you celebrate this evening was waged and won in the land of our ancestors, whose history is strown with choice memorials of the sources of our own freedom. The progress of Great Britain, since she emerged from the middle period, has been the gradual yet constant growth of a nation of mechanics. The constitution of England, her unwritten law, deeply imbedded in the

customs of her people, goes back for its derivation through all the stages of her advancement in these utilities. The stern features of feudalism, which first gave to it an ascendancy over the crown, have received in successive periods the softening influences of the arts which have made her system of industry a nursery of liberal ideas. Their imperial life, their enfranchised individuality, from which we at first derived our own, have grown up from her wharves, and warehouses, and workshops, until now they have become the first estate of the realm. That no tax should be extorted without the consenting voice of the legislature, has come from the early traders and mechanics whose defiance spoke in the cause of John Hampden; every representative reform has been the achievement of the towns rising over the ruins of baronial bowers; that no man shall be imprisoned by the royal will, is one of the flowers not of regal dispensation, but of the new classification of labor; religious freedom to the dissenter has gushed out from the wealth and influence of dissenters who run machinery and watch the hustings; the independence of the judges is a fruit of the middle interest of the nation which can disrobe the ermine when it becomes impure; the limitation of Parliaments is the decree which is heard from the Manchesters, the Sheffields, and the Liverpools; the liberty of the press is the inspiring utterance that rises from a thousand fields, on her land and sea, in which a roar of waterfalls mingles with a myriad of steam-engines in tones which all the kings of the earth cannot silence. In the whole round of her drum-beat her conquests have been the conquests of these arts. If it be true, as it has been said, that Arkwright, who placed cotton spinning in the weird sisterhood of national powers, bore the English nation triumphantly through the wars of the French revolution, it is equally true that neither Pitt nor Wellington, but Watt, who organized the steam-engine, was the conqueror of Napoleon. And within our own memory the final disenthralment from an overshadowing aristocracy

was secured in a single day by the brilliant triumph of the "untaught inarticulate genius" of George Stephenson, when he gave the first start under high pressure to the express train that made over the Liverpool and Manchester road the grand trial trip of the age of progress,—the inventor and engineer being the plain Northumberland mechanic,—the witnesses, Brougham and Wellington and Huskisson, ladies, court and people,—and the freight, all the interests and all the hopes of civilization. Truthfully and philosophically did Dr. Arnold of Rugby exclaim, as he stood upon one of the bridges and watched the train flashing through the fields belonging to lords who had done their utmost to thwart the experiment: "I rejoice to see it, and to think that FEUDALITY IS GONE FOREVER."

It would be pursuing a topic already too familiar to discuss at any length the relations of the mechanic arts with the development of public liberty in this country. They were, more distinctly than other interests, the causes and agencies of its independence. About the middle of the last century manufactures acquired an importance in Europe which distanced all former example, and spread rapidly to this side of the water where they found a population in the Northern colonies who for many years had been trying their hands at the same kind of work. Under the new impulse which now began everywhere to stimulate these pursuits the people of Massachusetts and of other colonies eagerly caught at all suggestions which came from Europe and quickly added to them their own originalities of invention. Then came the repressive and at times prohibitory policy of Great Britain, having all the power of Parliament to support it, aiming to destroy these hives of skilled labor while they were yet forming and before they should be able to compete with those of the Mother country. The purpose was the impoverishment of the colonies in the departments of handicraft, and as Mr. Burke said in his great speech on Conciliation, the English nation seemed to act upon the thought that America was becoming

her rival in this class of production. Such legislation aroused a responsive spirit of resolution on our side, and the men who were pursuing these labors and were imparting to the life of New England a vigor and elasticity she had never before possessed, became restive under the restraint, resentful to tyranny, and ready for independence. So that when the time came for rupturing the tie of empire, the question of taxation was rather the occasion than the primary cause of the war. The Revolution was a necessity out of years of accumulating measures of despotic rigor and repression, all directed to shattering the arm of art and skill in these northern communities. The last blow which evoked the spark that burst into a blaze of conflict fell ostensibly indeed upon commerce; but the thousands who had been struggling at the infant manufactures of the time, whose manly hopes and sinewy arms had been kept down by legislative oppression dictated from a throne three thousand miles away, now outnumbered the merchants and helped them to spread the flame. These were the men, the mechanics and artisans of Boston and the seaboard, who made up the constituency that stood behind Samuel Adams as he walked these streets watching and directing the rising storm. There was something in their experience under the British colonial system that urged them on to the contest; there was something more in their occupation, as creators in the system of political economy and in the domain of art, which elevated them to lofty conceptions of manhood and made them fit for earnest service in the struggle for liberty.

Singularly and especially after the Revolution, were your interests instrumental in organizing peace under a constitutional union of the States. The name of the early President of this Association, PAUL REVERE, worthily retained in our day in the relations of hospitality, of trade, and of manufactures, remembered in connection with all that he accomplished for the establishment of our national government, at the first mention of it

snatches from my lips everything I could say, if I ought to say even a word, upon a branch of my theme so interesting as this is. It has always appeared to me the wonder of our history, how, out of the chaos of the individualities of States, out of commercial diversities and political antagonisms, out of the idiosyncracies of climate and domestic institutions, out of conflicting reminiscences of origin, settlement and race, any Union at all ever came to us ; but the wisdom of the God of our fathers was higher than ours. There rises before me the beauty, the mystery, the harmony of the States and the classes which from so great diversity united in framing and confirming the Constitution. Our own New England was divided so that if Massachusetts had an interest and a patriotism which overcame some of her theories and gave her among the earliest to the Union, Rhode Island had a revenue policy and perhaps some other reasons which kept her out until a little after the eleventh hour. In the convention of New York and Massachusetts, I suppose that question, so vastly interesting to the generations of America, to have been decisively settled for the whole confederation ; and in both of these States it is not too much to say now in the light of tradition and history, that if it had been left exclusively to the landed interest, the government under whose flag your exhibition illustrates alike the victories of arms and of arts could scarcely have been established. Here in Massachusetts the communities in which manufactures allied to commerce had made most progress, turned the trembling scales in favor of its adoption ; and I believe it is a fact now well understood, that when eminent men, who led the councils of those days in this State, hesitated about the ratification, the manufacturers and mechanics, animated by the fire and patriotism of Revere, pressed them up to duty, and enforced the decision of the convention. Quite similar were the circumstances which attended the result in New York, in whose convention the Constitution received the vote of only the slightest majority of delegates.

To the genius and efforts of Alexander Hamilton, which never shone more conspicuously than in the convention at Poughkeepsie, that conclusion will forever be attributed. He was a delegate from the commercial metropolis, but his election may be traced to the meeting of the mechanics of that city, who assembled at the house of William Ketchum, and determined that he should be elected. History, that selects her heroes, whether in peace or war, from the number of those whose speech rules the forum, or whose command propels squadrons on the field, and cannot pause to inquire who chose the orator, or who fought under the order and the bugle, awards to Ames and his associates in Massachusetts, to Hamilton and his associates in New York, the honors of the adoption of the Constitution and of the ages of glory under it. Inquiry and analysis disclose to us the antecedent detail,—how the manufacturers and artisans of Boston and New York furnished to Ames the inspiration of his eloquence, and to Hamilton the opportunity for the amazing display of his intellect and his demonstration which carried the day for all coming time. The fame of your Association culminates this evening in the bare mention of their renown.

The limitations of this evening's exercise will not permit me to consider with any detail the influence of the mechanic arts upon social progress ; that would be a task for history and for volumes. It will surely be sufficient for the lighter purposes of the present occasion to treat the topic rather by illustration than by narrative or argument, especially since our own experience and observation supply all needed argument.

An eminent English writer, Mr. Carlyle, who has not been at all satisfied with us in war, has criticized our condition as severely under peace,—claiming that we have lost our belief in the invisible, and that we live and hope and work only in the visible, the practical, and the mechanical. The theory is that our best days are over, that our spirit has become tame and

enfeebled, and that under the prevalence of the material, the commercial and the mechanical, our social tone and temper has lost its higher energy and sentiment. No argument can satisfy this theory, but historical illustrations scatter it to the imperceptible winds. This transcendental ideal of life, in its contrast with the later and experimental ages, is illustrated in the type of the earlier centuries which gave the trial to that doctrine and opened the way for the trial of ours. I invite you to the comparison.

During the long period which closed when modern history began there was no lack of philosophy, but a vast want of mechanical utility. Great masters filled the world with syllogisms, but with no new tools for workmen. They were rich in brilliant conceits, fine abstractions, and keen dialectics, but few new inventions, or practical improvements in morals or social existence, had a place in their barren fields. The conveniences and comforts of life were esteemed too vulgar for that philosophy. Alike in the night of the pagan schools, and in the dim twilight of a corrupted Christianity, men disputed in never-ending cycles of abstract conceptions, of ideal good, of the essence of things—and where one left off another began and ended. The useful was undignified; and while true wisdom might well be found in reasoning after the organization of the soul, it could not come down to the idea of windows through which men might see, and of pipes that should warm their freezing bodies. Angles of thought were polished to more than Damascan lustre, but angles of iron, in its thousand styles for use, would have been a scandal to the Grove and the Portico. Even the imperial intellect of Aristotle might have been pleased by the suggestion of a swinging pendulum as illustrative of the action of the human mind, but the intimation of its application to a Yankee time-piece would have ruffled his proud spirit. The idea of the electric fluid would have been accounted sublime as an abstraction, but the sight of Franklin flying a kite

to evoke an eternal law from the skies to protect our houses and barns, would have wrung a pang from many a Grecian philosopher. Those were great times and great men, but there were few benefactors in the larger sense pertaining to the whole of time. There was little of progress, for all that was taught died with the disputant, and there was nothing left to be transmitted to the next age for adoption or improvement. Even down to the hearing of modern ears this subtle philosophy held its control; alchemy, astrology, and the vain pursuit after the philosopher's stone were in highest favor, while the arts and inventions that supply and elevate the race were in scholastic outlawry. During all this philosophic millenium, governments were treated as ingenious agencies for conducting men to the ideal of virtue, and not as the splendid structures of experimental wisdom for enriching the people in all that art, and wealth and morals can provide for the multiplying wants of social man. Unpractical schoolmen rose in proud succession, and through their gigantic intellectual machinery, furnished dogmas enough to the State and the Church for generations even now unborn; but, viewed from the observatory of a modern, living age, they appear in some respects not unlike those massive windmills which formerly amused summer hours at Newport, whose ponderous arms revolved with fearful momentum even after the last kernel of fruit had departed from the hopper.

But at length, in the fulness of time, our new producing powers acquired possession of the field. Their rapid development has been commonly ascribed to the change which Lord Bacon introduced to the studies and pursuits of men, under which physics, arts, utility, progress, have for centuries ruled over the circuit of human thought. Certain it is, that within a century after his accession to the mastery, the toiling and patient philosophy of induction and experiment, of investigating, step by step, and process by process, for the laws which guide mankind in their efforts to subdue matter and combine forces, was

held in highest favor. Agriculture started from its slumberous bed as if touched by the wand of a charmer. Disputations of the schoolmen receded, and governments and morals and arts began to be judged by their effects. Alchemy and astrology fled with their lost dignity, and the arranging and adjusting of natural forces took their places. Kings had their laboratories, judges studied watercourses, and fine ladies turned some of their patronizing glances from the halls of courtiers to the hitherto vulgar labors which make tradesmen, artisans and farmers. Architecture began to be contemplated in its bearings upon the common ranks of life ; houses to be ventilated ; lands to be drained ; machinery to be invented and set to work ; trade to become respectable ; and the pursuits of man to receive that direction which has continued in an ascending scale until now our civilization is largely a record of these practical studies and these multiplied powers.

Suppose now that Lord Bacon could come back in the flesh, accompanied, if you please, by some of those masters in natural science and mechanical construction who have become familiar to us as public benefactors, and could tarry long enough to survey this vast convolution of results which sweeps the globe in its circle of blessing,—what a scene would meet their astonished gaze !

They would behold hundreds of millions of people engaged in occupations which in the old time had not been thought of,—such a panoramic view of enterprise, and production, and consumption, as would have startled their own vivid imagination in lifetime. They would witness coal fields and iron mines reclaimed from long neglect and become the very bases of modern civilization without which nations cannot be opulent or independent,—the earth kindly opening its depths to receive myriads of men who, by the light of science and the aid of arts, bid defiance to its darkness and its gases, pump away its water and its refuse, and extract the ores and metals which are

wrought to fit a thousand utilities and to become objects of inspiring beauty ; agriculture restored to the honor of the time of the patriarchs, goaded by energies unknown before, enlivened by modern machinery and modern markets, and in return conferring upon them its victorious sheaves. They would behold

“ steam, that fleshless arm,
Whose pulses leap with floods of living fire,”

changing the features of the world, commingling the flags of countries in the dance of the sea, darting great ships in defiance of the winds and the breakers, and railroad cars where before no horse had penetrated, operating more machines than the hour would permit me to enumerate if I knew them, sending out from this city every morning before the cock crows thrice an hundred thousand printed sheets which Cabinets read before they decide, and all New England before it approves,—facilitating intercourse, acquaintance, refinement, joy ; in Great Britain alone twenty thousand engines driven day and night with a power equal to two millions of men ; the artificial and mechanical forces of our land exceeding all the hands of the four continents of the globe a century ago, and two-fifths of our male population over fifteen years of age employed in manufactures, the mechanic arts, commerce and mining ; bays and rivers and gulfs spanned with a strength that shall never fail and with a beauty that shall survive the decay of the Parthenon ; the wilds of the country reclaimed, cities starting up as by enchantment, crowded with order and intelligence by day and lighted up by a flame that never goes out by night ; in our own empire thirty thousand miles of railroads, making peace always ready for war and converting war into peace, with a quickness and a quittal which other times never knew ; in this same America twenty-five thousand miles of wires, I dare say there are more, mute yet eloquent, talking up to the high noon of night, of wants and supplies, of trades and battles, ever flashing with the messages

of the living and dead ; a commerce taking the products of the land and of the machines to the side of the sea, and there committing them to another country, another world ; a system of credit and exchange founded on religious truth, sustained by honor and faith, blessing him who gives and him who receives ; a civilization they would behold, and admire, and pray for, which places it in the power of man to " wield these elements and arm him with the force of all their legions."

This photograph Lord Bacon and his companions would accept as a picture of a portion, and only a portion, of the fruits of the tree of modern utility, which he assisted in planting, whose roots are intrenched in every well-ordered State to-day, whose pendant boughs canopy our time. These they would recognize as the trophies which are sometimes characterized as the material successes of commerce and the mechanic arts. Nor material successes only. For the survey would be incomplete which should not perceive the average duration of human life lengthened out, alleviations of suffering discovered, some diseases eradicated ; these steam presses opening a flood of literature and scattering the Holy Scriptures like leaves for the healing of the nations ; the English language pervading the earth with exquisite thought and immortal charity ; schools made free, universities accessible, and churches thrown open, where but recently solitude reigned supreme ; institutions of benevolence sending up to Heaven their thanksgiving and spreading their benefactions through society for the ills of the body and the mind ; history at her work clearing up the mysteries of time ; poetry sending its deep-toned vibrations through the heart of the age ; the fine arts awakening the soul in its daily toil to the eternities of love and beauty ; and the body of law and order breathing with a free spirit and laying a kind, restraining hand upon the waywardness of our nature. Who is the man, so unbelieving in the very presence of this world-wide exhibition which is passing before him, as to say that this

mechanical period has not outstripped every former period in the generality of its progress and in the loftiness of its ethics?

So also, gentlemen, the area of the hall of liberty and the market house which you have thrown open to the public for three weeks of holidays and for universal instruction, is crowded with proofs that your department of industry is alive with the higher taste and sentiment which becomes a part of æsthetic culture. There I behold inert substances transformed from their own mute creation into the properties and activities of mechanical life,—that which was dead in nature made by skill and art to speak in a language felt and understood by the great circle of humanity,—the wood, the metal and the ore, so changed as to become a charm to the eye, music to the ear, and an awakening medium to all the sensations which are undying in the heart of man. I see the rude sands scooped from the natural beds of Berkshire, fused with alkalies, and unified into forms which, if they were less common, would be valued as the rarer diamonds; I witness that model steam-engine under action, which was brought hither from our county of Worcester, out of a shop where I have seen three hundred loyal and lordly men pounding their intelligence into the work of their hands; my eye ranges over the textures made up out of the fleece from the Western prairies or the white ball from the Southern savannas, so fine that a pound of cotton has been lengthened and attenuated into a thread of a thousand miles. These are the works,—but whence has come the conception? These are the arts,—but who are the artists? Is it according to the analogies of our knowledge, that they who perform these things can be coarse and rude in their natures, unresponsive to taste, and sentiment, and humanity? The modern artificer is the creator of beauty, and lives amid its forms and its suggestions. The soul of mechanism is animate with poetry. The ideals first exist in the mind of the mechanic, and are next transferred to wood and metal, and then are applied under the

laws of time, and space, and fluids, and at length are invested with a perpetual life of motion that finds its type in the revolving spheres of the heavenly world :—and tell me, can these things be so and not awaken all the capacities of his nature to the pleasures of culture, and refinement, and sensation? The social life of our time is pervaded by the æsthetics of the mechanic arts. The eye, the sense, the soul of the State finds a school larger and freer than municipalities ever founded, so long as men, women and children throng their way to the splendid machine, gaze upon its unwonted style, its Gothic strength, its columnar supports, witness the balances of its action, the awful and mysterious silence with which it works, the ideal of proportion that makes it “the glass of fashion and the mould of form,” and retire with plaudits for its architect and with blessings on his head. And if you follow out the thought, and apply it to the endless diversities of mechanism, and consider how extended the subdivision of this labor and art becomes, and how it individualizes the man and starts his nascent tastes—and how it unfolds on another plane and in another grade, and produces a Powers, a Story, a Clevenger, a Ball, a Hosmer—I cannot believe that you will hesitate to reckon this field of study as a part of the higher culture that places upon this age a brighter coronet than any that was ever won by mediæval kings. These arts impart to our country and to our generation the qualities of an epic age. The English traveller spoke the truth who returned home after his tour in America, and published his declaration that, far from being destitute of the poetic element, our country is itself one grand national poem. The spirit of that poem is beyond every oriental example. It is not content to float lazily in sharp-nosed gondolas to the music of “flutes and soft recorders,” but it asserts a loftier mission, breathes through all the arts at home, and utters itself from our “Flying Clouds” and “Howling Winds,” and all other clipper ships, of whatever name, over the zones of the earth.

And thus, approaching the manly arts which your Association represents, and in my brief hour only by allusion touching, not tracing, their mysterious origin and their unrecorded growth, their effect in developing the resources of the earth, their relations to the liberty and the progress of man, and their connection with the popular genius and the popular education, I know not how better to express in a few words their beginning, life and results, than by quoting the lines of a charming poetess:—

“There walks a spirit o’er the peopled earth,
Secret his progress is, unknown his birth;
Where’er he turns the human brute awakes,
And roused to better life his sordid hut forsakes;
He thinks, he reasons, glows with purer fires,
Feels finer wants, and burns with new desires.
Obedient nature follows where he leads,—
The steaming marsh is changed to fruitful meads;
Then from its bed is drawn the ponderous ore,
Then commerce pours her gifts on every shore;
Then kindles fancy, then expands the heart,
Then blow the flowers of genius and of art.”

Gentlemen, I conclude as I began, by felicitating you over the present condition of your Association, and by adding my appreciation to that which you must have of your position in the great confederacy of arms and of arts. Your exhibition represents the power of New England in war and in peace. The mechanics of Massachusetts bore a leading part in the opening scenes of the recent struggle. This is well illustrated in what General Butler has told me,—that when, in the dark days of the memorable April which shut off Washington and THE GOOD PRESIDENT from communication with the country, he was on his way with one of our regiments to the relief of the capital, and at Annapolis found the only remaining locomotive dismembered by rebel hands, he inquired of his men whether any of them could restore it,—upon which a half dozen stepped forth from the ranks, saying that they had helped build that

engine in one of the shops of Massachusetts, and they could put it together again; scarcely sooner said than done, and the Massachusetts machine speedily took a thousand Massachusetts bayonets and Massachusetts hearts into Pennsylvania Avenue, and saved the government from the abyss which was already yawning to receive it. This patriotic and effective example was sustained by the producing classes of the State throughout the war, alike here at home in the preparation of supplies, and by the gallantry of her serried files in the field. And now, when martial scenes have disappeared, the same high duty rests upon the people of the Commonwealth, and the same lofty triumph will reward them. This prosperity and happiness among ourselves, this influence, this credit, this renown in all our relations with the country and the world, plead trumpet-tongued that these arts, without which there can be no sceptre for us, may be developed and extended until they shall diffuse their benignity over all States and over all ages. Happy are you in the privilege of enjoying so conspicuous a share in advancing the civilization and the power of your native land.

THE LEEVE.

In accordance with former custom, after the delivery of Mr. Bullock's Address, the Government of the Massachusetts Charitable Mechanic Association held a Levee, complimentary to the contributors to the Exhibition and the judges appointed to examine and report on the various articles contributed.

The following gentlemen were appointed to act as marshals during the evening:—

Albert J. Wright.
 Henry A. Lyford.
 Henry W. Wilson.
 Horace C. Rose.
 Theophilus Burr.
 George H. Chickering.
 Alfred A. Mudge.
 S. S. Woodcock.
 Nathan Sawyer.
 Robert Hawthorne.

John A. Robertson.
 Charles E. Perkins.
 O. J. Rand.
 Edward Jones.
 William H. Dutton.
 Levi Chubbuck.
 George K. Hooper.
 E. B. Badger.
 O. J. Faxon.
 Henry Chaffin.

About five hundred members of the Association and invited guests assembled in the new and spacious Hall of the Horticultural Society, at the conclusion of the exercises at Tremont Temple. After a brief interchange of congratulations on the success of the Tenth Exhibition, a procession was formed in the reception room under the direction of the marshals, and marched to the upper hall, where a bountiful entertainment had been provided by that prince of caterers, Mr. J. B. Smith. Hall's band was stationed in the orchestra, and furnished a variety of excellent music during the evening. The President asked the attention of the company, and introduced the chaplain, Rev. J. M. Manning, who implored the Divine blessing on the feast and the occasion.

After a delightful half hour of sociability and gastronomic exercise, the company were called to order, when the President of the Association, Joseph T. Bailey, Esq., delivered the following congratulatory Address:

ADDRESS BY PRESIDENT BAILEY.

GENTLEMEN :

We are met this evening, under the most auspicious circumstances. Since the last Exhibition of the Association, the great American rebellion, which aimed to overthrow the liberties and the Constitution of the country, and which required a sacrifice of blood and treasure to suppress, is now a matter of history. In accordance with custom and precedent, our Exhibition should have been held in 1863. Forced by the war to defer until 1865, and meeting as we are to-night, with none to molest or make afraid, allow me to congratulate you upon the success which has attended our endeavors in inaugurating the Tenth Exhibition of this Association, and in presenting to the public, results of the skill and inventive genius of the artisans and mechanics of the country. Our halls are filled with the most beautiful fabrics, interwoven and prepared with patient toil by delicate fingers, and with an almost endless variety of labor-saving machines, propelled, in part, by steam, the whole forming one of the grandest collections ever exhibited in this city, upon which thousands have already gazed with admiring wonder.

While the display of machinery designed to save labor is large, the display of goods which they were made to manufacture is small. This is especially true of cottons and woollens, showing that the mechanic is more ready to put in competition his inventive genius and skill than the merchant is the products of that skill. And we are constrained to feel that, unless something more is done to encourage our artisans, they will be inclined to leave our rock-bound coast and sterile hills, for more genial climes, now opening before them on the sunny plains of the South.

The Mechanic Association, by holding these exhibitions, is endeavoring to encourage a commendable competition in the manufacture, both of the useful and the ornamental, and thus

show to the community the progress which is made from year to year. The pecuniary profit alone is not the primary object of the Association in holding these exhibitions. If this were the case, they would assess themselves, and thus dispense with their arduous labors. The receipts from visitors are large, yet the expenses are correspondingly large, and will amount to more than twenty thousand dollars, ere the exhibition comes to a close.

Our thanks are due to our contributors for the prompt and liberal manner in which they have responded to our call; for upon them we have relied to make the display sufficiently attractive to draw in the public, and thus meet these heavy expenses. We, in our turn, have endeavored to aid them in every possible way, so that their inventions might be properly placed before the community, and their beauty and utility appreciated. The practical value of our exhibitions to inventors cannot be overrated. Shut up, to a great extent, within themselves in the endeavor to create that which their minds have conceived, they are glad, when their creations are completed, to place them side by side with others, that the public may judge of their merits. It is a matter of great rejoicing that this community appreciate the skill and talents of inventors; if it were otherwise, the productions of useful, labor-saving, and ornamental articles would have had comparatively little sale, and genius and talent would, to a great extent, be dormant and inactive.

To the judges, we express the same gratitude for their ready response to our call for disinterested men to examine and pass judgment upon the merits of our contributions. Most of them are gentlemen in active business life, and they have generously devoted whatever of time has been necessary to this service, to the neglect, it may be, of their own personal affairs. The managers fully appreciate their valuable aid, and trust they will have their reward in the encouragement of honorable inventive toil.

Our thanks are also due the public for the liberal patronage they have bestowed upon our exhibition. The artisans and mechanics of every name, who have displayed the results of their labor here, have been greatly encouraged by the thronging thousands who have gazed with delight upon the numerous articles with which our halls have been filled.

To the daily and weekly press, to which we have been so largely indebted for generous notices, both before and since the Exhibition was thrown open to the public, we present our hearty thanks. Their favors have been most gratefully received, and are hereby publicly recognized.

We would not forget, also, to acknowledge with profound gratitude, the eloquent address from the distinguished orator of the evening. During the unhappy civil war which has but just terminated, his eloquent utterances have thrilled the loyal heart, not only of this Commonwealth, but of the whole North; and we would to-night tender to him our hearty thanks.

Let us hope that when the next Triennial Exhibition shall occur, it may find our whole country, "however bounded," united, prosperous, and happy, with a future, grander, and more glorious than the most enthusiastic dreamer has ever imagined.

At the close of the President's remarks, he proposed "The health of the orator of the evening," which was received with applause, and three hearty cheers were given for the Hon. Alexander H. Bullock.

The President called on the chief marshal to officiate as toast-master, and appropriate sentiments were eloquently responded to by Doctor George B. Loring of Salem; Major Ware, of the State department; Hon. George W. Messinger, Chairman of the Board of Aldermen of Boston; Hon. Mr. Barstow of Providence, President of the Rhode Island Mechanic Association; Mr. Elwell of Portland, on behalf of a delegation from Maine; Professor Rogers, President of the Massachusetts Institute of Technology, and others.

The guests retired at a seasonable hour, well pleased with their entertainment.

14

ADDRESS

DELIVERED AT THE

THE NEW YORK
PUBLIC LIBRARY
P27273
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1898.

TWENTY-SECOND TRIENNIAL FESTIVAL

OF THE

MASSACHUSETTS

CHARITABLE & MECHANIC ASSOCIATION,

October 21, 1872,

BY HENRY W. WILSON.

☆ MASS. HIST. SOC.

BOSTON:

WRIGHT & POTTER, PRINTERS,

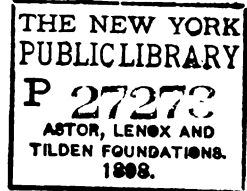
19 PROVINCE STREET.

—
1872.



ADDRESS

DELIVERED AT THE



TWENTY-SECOND TRIENNIAL FESTIVAL

OF THE

MASSACHUSETTS

CHARITABLE & MECHANIC ASSOCIATION,

October 21, 1872,

BY HENRY W. WILSON.

BOSTON:
WRIGHT & POTTER, PRINTERS,
19 PROVINCE STREET.

—
1872.

MECHANICS' HALL,

Boston, Oct. 30th, 1872.

HENRY W. WILSON, Esq.

DEAR SIR,

I am directed, by a vote of the Government of the Massachusetts Charitable Mechanic Association, to present the sincere thanks of the Association for the eloquent and instructive address delivered at the celebration of the Twenty-second Triennial Festival, and to request a copy at your earliest convenience for publication.

I am, very truly yours,

JOSEPH L. BATES,

Secretary.

190 DORCHESTER STREET,

Boston, Oct. 30th, 1872.

DEAR SIR,

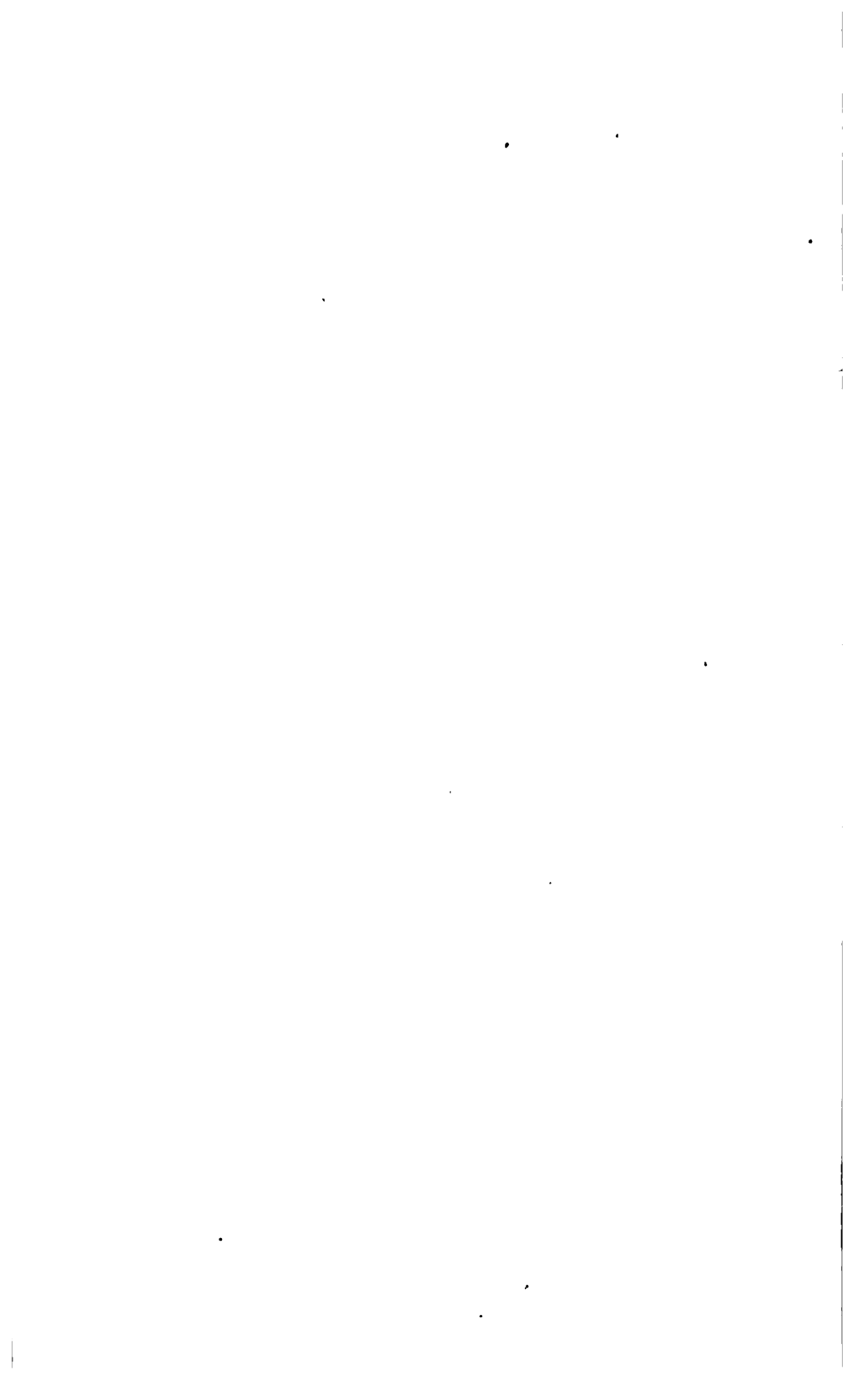
Enclosed you will please find the copy of my address, agreeably to the request of the Board of Government, with many thanks for the complimentary allusion to my unpretending efforts.

I remain, very truly,

HENRY W. WILSON.

J. L. BATES, Esq.,

Secretary, M.C.M.A.



ADDRESS.

Seventy-four years ago, a little company of twenty-nine members of this Association assembled in the Old Green Dragon Tavern, famous for its Revolutionary associations, and celebrated what was, in reality, its first triennial festival, as it was its third anniversary.

The records state that they "sat down to a well-provided table, and fared sumptuously;" toasts were read, "which, being so completely adapted to the occasion, were received with eclat, and interspersed with songs." The sumptuousness or economy of this entertainment can best be appreciated when it is understood that the entire expense did not exceed nine shillings, New-England currency, for each person.

The Association had, at that time, been in existence but little more than three years; no new members had been admitted during the year 1798, although 33 had been admitted subsequently to the signing of the original constitution,—not all of whom, however, had complied with its requirements,—who, together with the original 83 members, gave a total of 116 persons entitled to membership from the first formation of the society; still, by withdrawals, the number of active members had been reduced to 90. There is no

record of the financial condition of the Association for that year ; but at the previous annual meeting the total funds in the hands of the treasurer amounted to but \$312⁵⁰/₁₀₀, and the secretary's salary, which had previously been fixed at \$50, was reduced to \$20.

There was nothing at that time in the brief history of the Association, or in the promise of its future prosperity, which could have been flattering or assuring ; originally intended as a temporary means of self-defence against abuses incident to the trades, it had resulted in a consolidated organization of tradesmen, which was viewed with suspicion and distrust by the mercantile and professional classes, who thought they saw in it a combination to advance the cost of all the products of labor. Mechanics, not members of the Association, looked upon it with more or less of jealousy, arising from an ill-defined apprehension of possible adverse influences which it might exert upon their business or interests ; while even its members could hardly be said to have dwelt together in unity. As our chronicler mildly states the situation, "the society was not at that time a popular institution, and the members themselves were not in a state of the most peaceful harmony."

Such were some of the discouragements under which our predecessors met, three-fourths of a century ago, and forgot their embarrassments amid toasts and songs, with the good cheer of mine host of the Green Dragon. If they could make the occasion one of feasting and rejoicing, how much more should we, who, after such an interval of time, witness

the results of their small beginnings, and enjoy the fruits of the tree they planted and nourished. The continued existence of the Association, which was then a problem, has long since ceased to be a matter even of doubt or apprehension. Our membership has increased from 90 to 831 ; the ordinary annual receipts of the treasury have swelled from less than \$200 to \$20,000, and its assets, which were but \$300, now exceed, at a moderate valuation, \$300,000 above all indebtedness. Its disbursements for relief, which commenced in 1799, by the payment of \$10 " to the family of John Keith, a deceased mechanic, not a member," have steadily grown, until the distributions by the relief committee of the past year amounted to \$4,982 ; and although the records are imperfect, there is abundant evidence that the total sum so distributed since the commencement, amounts to more than \$60,000.

The operations of this committee are conducted with marked fidelity, and yet so quietly and unostentatiously that they are often overlooked in the midst of more stirring though not more important affairs. The delicacy with which this relief is administered is equalled only by its unstinted liberality ; and a most excellent, though inadequate conception of its extent and usefulness is afforded by the annual report of the committee, submitted to the Association, July 10, 1872. By this report, it appears that the whole number receiving aid, July 1, 1871, was 47
 Added during the year, 2

Discontinued, as not requiring further assistance,	.	.	.	4
Died, at the advanced age of 93 years,	.	.	.	1
				— 5
				—
Present number of beneficiaries,	.	.	.	44
Of these there are, males,	.	.	.	9
females,	.	.	.	35
				— 44

The youngest of them is 31 years of age, and the oldest, 93 years.

Number between the ages of 30 and 40 years,	.	2
of 40 and 50	“ .	1
of 50 and 60	“ .	1
of 60 and 70	“ .	14
of 70 and 80	“ .	13
of 80 and 90	“ .	12
over 90 years,	. . .	1

— 44

By this agency the bounty of the Association is bestowed with unsparing hand upon the aged, infirm, and indigent of our members, or the families which they may have left to our care. All have seen better fortune in other days, and many, wealth and prosperity. It is our privilege to render their declining years comfortable and free from want, and to prevent any member of this Association from becoming a burden at the public charge, when broken in health and fortune.

There has been paid to the families of deceased members,

agreeably to the provisions of our constitution, since 1802, when "\$40 was paid to Peter Makintosh, brother of John, a deceased member," the aggregate sum of \$27,725.75.

For educational purposes since 1828, when \$175 was voted to defray the expense of a course of lectures, up to the last year, when the sum of \$1,473.50 was expended in sustaining the apprentices' school, there has been paid more than \$30,000, and for the assistance of the Mechanics' Apprentices' Library Association, about \$7,000 more, making a total of \$37,000, which is a near approximation to the aggregate paid for the education and training of apprentices. Minor sums for miscellaneous purposes of a kindred nature would swell the aggregate disbursements of the Association for relief and education to at least \$100,000.

This remarkable increase in material resources and means of usefulness which we now contemplate, is largely, if not almost wholly, the result of the self-denying labors and good management of some who are assembled with us here to-day, and who have guided the affairs of the Association for the past twenty-five years, during which time the most important of these results have been achieved; and while they can but afford us the liveliest feelings of satisfaction, still we are to accept and mingle with our mutual congratulations, a consciousness of new duties and enlarged responsibilities.

From a feeble and timid organization of mechanics who wrought with their own hands, at their several trades, among their workmen and apprentices, we have grown to be a corporation with large powers and great wealth, with a prestige

which has never been weakened, and is of itself a power, composed of men who singly control and manage business concerns of a magnitude greater than that of the aggregate of all its members in its earliest years. It has combined and represented the manufacturing interests to a very large extent, and furnished almost the only instance, in this country, where a series of general expositions of the arts and manufactures have been successfully and satisfactorily conducted. We have cared for the distressed of our own household and their families, and a great deal has been done — perhaps not all that could or ought to have been done, still it was all that appeared to be reasonable or proper at the time — to aid in the instruction and training of mechanics' apprentices.

The promotion of good fellowship by festivals and reunions has become a recognized feature of our Association, and the recurring seasons of enjoyment are anticipated with pleasure, and do much to preserve a fraternal feeling among our members.

But what are some of the duties and responsibilities which are brought upon us, as the consequence of so much prosperity and the possession of so many of the means of usefulness? Let us consider one, which was the occasion of that first meeting in January, 1795, which was undoubtedly the germ from which our Association has sprung. The call for that meeting was addressed to tradesmen, to consider the subject of securing legislation relating to apprentices; the evils they proposed to remedy, were those incident to any

people upon emerging from a protracted war, and endeavoring to repair its waste and destruction, — restlessness, and insubordination under wholesome restraint, and unwillingness to fulfil a contract after its substantial advantages had been attained. We have seen the same in our own day, and they were doubtless then the more annoying because previously comparatively unknown. At intervals since, the subject has forced itself upon the attention of the Association ; but there is no record of any action taken or result accomplished ; and, with all our achievements, the simple question which was asked so long ago is still unsolved, and the matter remains in the same uncertainty, but in a worse position, than it did seventy-five years ago. With nearly 280,000 persons engaged in the mechanic arts and manufactures, less than 2,500 are returned as apprentices, where there should be at least 25,000.

By improved processes and inventions, the operations and products of machinery have been carried to a surprising degree of perfection, while individual excellence and skill challenge our admiration ; but in those branches of trade which we may properly term the domestic trades, as they concern our domestic life and comfort, in the construction of our houses and the production of their furniture, utensils, and appliances, — in these trades, the reduction in the number of careful, skilful workmen has been continual and annoying. The great and embarrassing want of many of our most important trades to-day, is that of educated apprentices, to qualify themselves to fill the places that are fast being vacated

by our journeymen and master mechanics. The evils of which our predecessors complained in regard to their apprentices were removed—but it was at the cost of the system, and by not having any apprentices at all. The superior immediate inducements afforded by some departments of manufactures; the tempting allurements of traffic and speculation; the demands of our internal commerce, which has been called into existence during the past generation; the urgent demands for labor, skilled or unskilled, even if it is only physical force directed by ordinary intelligence, added to the natural disinclination of young persons to undergo the training essential to proficiency in any branch, whether of science or art,—these causes have operated to break down and almost destroy the old system of apprenticeship, which must be substantially revived again, if we would not give over all of our mechanical employments to untrained and unskilful men.

Our Association owes it to itself, the community in which it has flourished, and the very name which it has assumed, that it should aid in investigations and efforts, and cause them to be made to elevate the standard of skill, intelligence, training, and domestic comfort of mechanics and the operatives of our mechanical and manufacturing establishments. We owe it to those who are to come after us, that we maintain the standard of excellence in the mechanic arts.

Our members in their several callings have been foremost in urging on the mighty mechanical revolutions which have so far distinguished the nineteenth century. The application of steam to machinery and transportation, and that of elec-

tricity to the transmission of intelligence, have produced a concentration of population, and furnished the means of supplying them to a degree that is surprising and even startling. The population of the State in 1800 was 423,245 ; in 1830, it had increased to 610,408, by the regular ratio common to an agricultural people.

At this period manufacturing was of small or no account, the chief productive occupations of the people being agriculture and the fisheries ; and, although it is difficult to ascertain the maximum amount of population that a given area will sustain by agriculture alone, still, in the year 1830, with a population of $78\frac{25}{100}$ to the square mile, which is twice the density of the present population of either of the States of Maine, New Hampshire, or Vermont, Massachusetts had probably arrived at the stated point of density ; since which time all the growth of her population, now amounting to 846,000 persons, whether by immigration or natural increase, must seek their subsistence by some of the numerous branches of artificial industry which the demands of society and civilization have created.

By the rate of natural increase from 1800 to 1830, the population should have been, in 1870, about 926,000 ; the difference between which number and the present population, or 531,000, is the increase since 1830 by immigration from neighboring States or foreign countries, attracted by the superior opportunities for advancement afforded by our institutions and our varied industries.

According to the census of 1870, the population of the

State has increased to 1,457,351; of whom 19,000 gained their livelihood on the sea, 67,550 by tilling the soil, and 279,380 by mechanical industry, — being an increase, in ten years, of 1,500 farmers and farm laborers, 3,000 mariners, and 63,000 engaged in manufacturing pursuits.

The annual value of farm produce amounted to \$32,192,378, against \$21,556,162 in 1855, — an increase of \$10,636,216 in fifteen years.

The value of industrial products was \$553,912,568, against \$266,000,000 in 1860. Deducting the value of the raw materials, we have, as the actual net profit of the manufacturer, including wages, \$219,498,586 in 1870, against \$125,000,000 in 1860, — an increase of \$94,000,000, or $75\frac{2}{10}$ per cent., with an increased number of mechanics and operatives of only $29\frac{3}{10}$ per cent.

This large and increasing army of artisans and laborers is silently but surely moulding the destiny of the State, and changing the character and habits of our people. They contribute to the general comfort and well-being; they provide for our simplest wants and necessities, as well as minister to taste and refinement; the peace and security of the household, as well as the honor and dignity of the nation; the development and diffusion of knowledge, by the means of communication and transportation from one part of the country to the other, are becoming more and more dependent upon their enterprise, skill, and integrity.

It is to this swelling multitude of toilers that we, as an Association, owe one of our greatest responsibilities. They

are the producers, and by their labor comes the increase. It is not a matter of argument that success in business depends upon the manner in which it is conducted ; but it is equally true, that good policy and sound judgment both dictate that, in a manufacturing community, every reasonable effort should be made to elevate the moral and social standard of those who toil. It will bring its compensation in the additional security of life and property ; in an increased production, and consequent gain in wealth ; and in a greater stability in the condition of the community, which arises from and grows with the general happiness, contentment, and well-being. But should that standard be suffered to abate, the evils to be precipitated upon us will be bitter, and our regrets unavailing.

The developments of improved processes, and the creation of new branches of industry, or radical changes in the methods of business, will sometimes work temporary embarrassments and losses to other interests or communities.

We cannot escape the inevitable consequences if we try. We may seek to control, we may guide them somewhat, but the revolution goes on, and there is nothing left for us but to abide the result, and adapt our methods of life and business to the new order of things.

Consider the case of Nantucket, for an example of the effect of the development of new and improved processes, and the want of diversity in her industrial interests. Thirty years ago one hundred whalers were owned and fitted out at the island ; to-day, not one. Then, all was bustle and activity about her wharves and yards ; now, her wharves are

falling to decay, her factories and buildings have been profitably removed to the mainland. She made whaling the one pursuit upon which her prosperity depended ; a few experiments in a chemist's laboratory, changes in the means of transportation, and the oil wells of Pennsylvania, have done the work. Her population has diminished fifty per cent., being scarcely more than at the commencement of the Revolutionary war, and all for the want of a varied industry.

Out of these considerations, and the ineffectual effort to comprehend them, arise the vague notions that prevail concerning the relations which ought to exist between the employer and the employé, or, as it is incorrectly stated, between labor and capital ; for there is scarcely an employer or manufacturing company in the State that is not just as dependent upon the capitalist as the humblest laborer, while they are the first and greatest sufferers from whatever causes create unnecessary apprehension and alarm. Upon this question some well-meaning persons, and others whose intentions are not so good, have for years endeavored to create an issue under the name of Labor Reform.

We cannot permanently improve the condition of any class from without. Reforms, to be radical and successful, must be from within ; the application of the remedy must be internal and not external. No legal enactments can effectually correct abuses which arise from the prevailing habits and customs of the people, and which are not themselves amenable to law. Intemperance and vagrancy will never be removed from our midst by the operation of law, while it is considered social to

drink intoxicating liquors, and reputable to traffic in them as a beverage. No abundance of wages, or shortening of the hours of labor, can be productive of good to those with whom abundance is the incentive to extravagance, and leisure the opportunity for indolence, license, or excess.

Labor is the normal state of man's condition, and from it cometh health, plenty, and peace.

Whoever, being in health, labors not, is a drone; yet probably there never was a time in the history of this country when there was a greater disinclination to work at good, honest, productive toil than there is to-day. The spirit of unrest is deep-seated and wide-spread. It possesses both the thrifty and the thrifless: the one it urges to self-denial and the sacrifice of present comfort or enjoyment, that, sometime in the distant future, there may be realized the dream of an existence without labor; the other, while repining at his own ill fortune and the success of his neighbor, is only stimulated to work by his urgent necessities.

The causes which have led to this state of things are various: the convulsions and unsettling of established business relations, which have been so marked since the outbreak of the Rebellion, and were a natural consequence of a period of war and unreconciled peace; the spirit of speculation, destructive to the spirit of industry, and which is always produced by an unsettled state of values or credit; and, lastly, by a general individual prosperity, which is more wide-spread than is commonly admitted or even believed.

But, whatever the causes, or whatever the influences they

may exert upon human nature, it is the fact with which we have to deal, and for which we must devise a remedy. A series of resolutions which were recently adopted by a Labor-Reform Convention, commenced with this proposition : "Poverty is the great fact with which the Labor movement has to deal." This statement contains nothing new, as the amelioration of the condition of the poorer and destitute classes has always been the special solicitude of good government ; but it disregards in its statement another great fact, that, in this country, and more particularly in this State, unless in exceptional cases where it is the result of natural causes, poverty is almost always the offspring of indolence, ignorance, or intemperance. Indeed, it would be difficult to find a case of want and destitution, in which the primary cause was not one of these three.

The first is not indigenous to our people ; whatever else may be said of them, a want of activity is seldom to be laid to their charge. Ignorance is almost entirely an importation ; and intemperance, though common to all grades of society, is more generally prevalent among the foreign population.

In 1855, the number of persons in the Commonwealth who could neither read nor write was 27,539, or 2.25 per cent. of the population. In 1865, the number had increased to 50,110, or 3.95 per cent. of the population. This large number of illiterate persons was divided as follows : males, 19,134 ; females, 30,976.

Number of American birth, including children of foreign parentage : —

Males,	.	.	.	.	.	.	.	1,012
Females,	.	.	.	.	.	.	.	961
								———— 1,973
Foreign born : —								
Males,	.	.	.	.	.	.	.	18,122
Females,	.	.	.	.	.	.	.	30,015
								———— 48,137
								————
Total,	.	.	.	.	.	.	.	50,110

As the foreign population to the American population was only 20.95 per cent., these statistics carry their own conclusions.

Intemperance is a delicate subject with which to deal in an address upon a special topic, partly because of the strong feelings entertained upon both sides of the subject, when agitated as a political question ; partly, also, because many who clearly and honestly feel the evils which flow from the free use of intoxicating drinks, yet have among their pet weaknesses a lingering fondness for the "little brown jug." Yet any one who attempts to record or proclaim the moral condition of the mechanic classes, as they are to-day, must say that all the evils which they endure, combined, are not so harassing or vexatious to our master mechanics, or so disastrous and debasing to their workmen, as that of intemperance.

By a careful estimate, the total loss to the community in this State alone, from the cost of liquor uselessly consumed, the loss of productive labor while under its influence, and the destruction of property by its victims, amounts to nearly

\$15,000,000 annually, to say nothing of the loss of life, demoralization of society and business, suffering and destitution of outraged families, which are either directly or indirectly chargeable to the same account.

The conviction is gaining ground with many who have hitherto strenuously opposed what they termed sumptuary legislation, that no branch of mechanical industry would be tolerated or endured, which abstracted five dollars from the general resources for every dollar which it gained.

This corroding evil, which is the cause of more woe to the poorer classes than all other ills beside, must be met by kindness, firmness, and vigilance. We cannot entirely reform those now under its influence, though we must by all means save some, but by precept and example we must teach our children and youth to avoid those causes which lead so many to poverty, degradation, and death.

I can imagine gentlemen of elegant leisure and scholarly refinement looking out, occasionally, from their retirement, upon the scene of bustling activity which surrounds them, and, finding their philosophy unable to account for the rapid advance of manufactures, population, and wealth, retreating to their seclusion with doleful but well-meant admonitions at the sad havoc which a pushing and progressing people are making with the traditional habits and customs of the past generation.

Were I one of them, I could not better express my feelings than by language like this: "Where once 270,000 colonists tilled the soil and faced the sea, are now gathered a million

and a half of busy, bustling men, living in cities, working in factories, revelling in undreamed-of wealth, and struggling under harsh and hopeless poverty ; a community becoming more and more sharply divided between those who have and those who have not ; the responsibility and knowledge of government disappearing year by year with the old town meetings ; ignorance and vice keeping steady pace with the increase of poverty, while the old, ominous class-cries of other lands and darker days grow yearly more familiar to our unaccustomed ears." *

This, as a general statement, would be sufficiently startling to arrest the attention ; it is highly rhetorical, and reads beautifully ; it is euphonious, and sounds elegantly ; but the plain man who participates in these busy, bustling scenes would be puzzled to understand from what point of observation such a picture could be drawn. One would naturally infer that our farms are being abandoned and going to waste, that our sailors no longer go down to the sea in ships, while the furnace and the factory monopolize all the opportunities for toil, and furnish all the avenues to untold wealth.

Such a mode of statement is not ingenuous ; it exaggerates and withholds the truth. The prominence which the old Bay State holds to-day in wealth and manufactures is the result of the same spirit of enterprise and indomitable energy which originally planted the colony on these sterile rocks, and sent its hardy sons to seek their fortune on the deep.

Our farmers, it is true, are unable with the ordinary methods and appliances, to compete with those who till their broad prairie farms of boundless fertility; but they have reduced the area of unproductive lands during the last twenty years by 218,514 acres, or 17.87 per cent.; increased the value of their farming implements and machinery \$1,791,295, or 55.8 per cent.; and find their annual products, by improved and thorough culture, increased in value \$10,636,216, or 49.4 per cent. A generation ago this would have been called wonderful progress; now it is overlooked in the glare of more glittering success.

It is true that special manufactures are not a safe basis upon which to establish the permanent prosperity of any community, while this would hardly hold with regard to a varied industry; but the limits of our State are circumscribed; the area of arable lands is still more limited — being less than two thirds of the whole, and the soil itself is not generally fertile. In view of these facts, no one can for a moment suppose that Massachusetts could sustain any considerable population from her own agricultural resources; and as we have already seen, she has long since passed the stated limit of her population, since when her increase must be of those engaged in industrial labor, or the State must cease her growth.

But we have found by the statistics of the State, that the number engaged in agricultural pursuits is steadily increasing, while languishing commerce and fruitless fisheries have not yet driven the sailor from his ship on the sea to the shop on

the shore ; waste lands are being reclaimed, and the unimproved acres of the State are thereby diminished, so that while a largely increased attention must of necessity be given to the mechanic arts, the cultivation of the soil is not disregarded, but is carried to a higher degree of perfection than in any other part of the land.

The poor we have always with us, and their needs, if distressing, should call forth our sympathy and assistance.

No disgrace attaches itself to honest poverty, which, though sometimes harsh, is never hopeless, except for the utterly degraded and depraved.

Among the coming glories of our institutions shines the star of hope undimmed by the deadening influences of caste or class, which are only cherished by the haughty and proud. The honest, industrious, contented poor of to-day, a few years hence may start their children in life upon a higher plane of usefulness and preferment ; it is the steady, substantial growth, generation after generation, that best indicates true culture and established society.

There are many who rise suddenly from indigence to affluence, or from obscurity to prominence, but they are not always successful, either in adapting themselves to their changed relations, or in retaining their wealth and influence in their families. Fortunes, suddenly made, become as suddenly broken.

But where are those lines so sharply drawn between those who have and those who have not ? Thousands yearly throng to our shores, sunk in poverty and wretchedness, escaping

from tyranny and oppression, with the hope and prospect of bettering their fortunes by joining the ranks of our toiling classes. Among them are doubtless some, — it would be strange if there were not, — who bring with them and sound the loudest those "ominous class-cries of other lands," which so grate upon the ear of cultivated leisure and hereditary wealth; but, after making all due allowances for these, it will be found, upon investigation, that although property may be in some instances largely concentrated, it is also greatly diffused; its gradation, from these who have most to those who have least, is as regular now as it was a generation ago.

The whole number of legal voters in the State in 1870 * was 262,120; of these, 150,488, or 58 per cent., paid more than a poll-tax; in the city of Boston, the rate was somewhat less, amounting to 40 per cent.; of the remaining 111,632, who were assessed simply for a poll-tax, there are no means of ascertaining how many of them had their little accumulations snugly put away at interest, where the vigilance of the assessor would fail to find them; but the savings-banks returned the number of their depositors the same year at 560,000, with deposits amounting to \$163,000,000.

Thirty-five years of constant and intimate acquaintance with the very humblest and poorest of our people, and twenty-one years of active experience at a calling which affords continual knowledge of transactions in real property, have impressed me fully with the conviction that among the very

* Report of the Secretary of State, made February 11, 1870.

humblest of the laboring classes, the acquisition of homesteads is steadily increasing; not abodes assuming any degree of style, but houses plain, simple, and unpretending, oftentimes tasty, and far better than their owners had ever enjoyed before. To-day, the class of property most in request, and yielding the best and quickest returns to the builder, is the small, single house which can be sold at from \$2,000 to \$4,000, and the supply is not equal to the demand. Not long since I had occasion to lay off from a large estate one little lot, measuring only $14\frac{1}{2}$ feet front by 46 feet in depth, and containing only 667 square feet; — yet upon this lot was located a dwelling and a stable, furnishing a comfortable shelter for the proprietor, his wife, two grown sons, a horse, cow, and pig; the value of the property was perhaps \$500, and its owner was one of the happiest and most demonstrative of men, and proud of his homestead; frequently, when passing by, I have seen him deliberately pacing off its narrow front, and conning its boundaries, as if by some possibility encroachments might have occurred, as he naively phrased it, “unbeknown’t to him.”

Go into the humblest quarters of our cities and towns, and you may find whole streets of these modest dwellings of the independent poor, not many of them so small or so fully occupied as the case I have cited, but still so diminutive and narrow that many a sympathizing philanthropist who studies mankind downward rather than upward, wonders how the family could be accommodated in so cramped a space. My youthful head was sheltered by such an humble dwelling, and

nowhere have I found a more earnest spirit of inquiry into those matters that most deeply interest the citizen and taxpayer, or a more conservative regard for the rights of person and property.

In no surer way can we serve to protect the community from convulsions and political disorder, than by encouraging the acquisition of homesteads by the poor and laboring classes. It is a field that promises better results to the labors of the philanthropist, than stirring them up to feel that their poverty is a personal grievance, which can only be redressed by subverting the rights of property and obliging those who have, to share their goods with those who have not.

The old town meetings are disappearing year after year; and why? Because the people are sufficiently informed of the principles of self-government to know that a town organization is entirely inadequate to administer the affairs of a large community, or to properly and justly obtain the will of its citizens upon those interests which concern them most deeply; those men who will rally in the strongest numbers to vote the appropriation for a new engine-house, district school-house, or firemen's parade, yield the feeblest support to, and manifest the least interest in, those great sanitary measures, such as the maintenance of a water supply, or the establishment of an adequate system of sewerage, — without which a dense population cannot long be preserved from disease or pestilence.

Ignorance and vice do keep pace with the increase of poverty, but they are the cause and precursor, not the result

of it; could they be removed, continuous poverty would become unknown.

We are passing through social and political changes, which at any other epoch of our national existence would have been considered crises. The shock of civil war convulsed all grades of labor, and undoubtedly produced many of the changes which have increased our communities beyond all prediction or precedent. There still hangs over us the burden of debt which it entailed, representing simply the cost of the destruction of life and property, and which by a fiction is called to represent money and value; this producing inflation and expansion, has brought increase of prices and artificial wants to all the laboring classes, who, failing to supply their wants, both fancied and real, with the products of their toil, become restive and uneasy.

Strikes and lock-outs, crimination and recrimination, aggression and retaliation, follow in rapid succession, until both employer and employé become crippled, — the one by the loss of wages which he can ill afford, the other by interruption of business and the increased sensitiveness of the capitalist, by whose aid alone he is enabled to carry on his enterprise and employ his operatives. The fact that the manufacturer is as much dependent upon the capitalist as the humblest laborer, is lost almost entirely from sight.

The commonly accepted statement of the relations of labor and capital, as they are associated in business, has been nowhere so concisely stated as in a remark of Lord Derby, which is all the more remarkable as coming from a nobleman

of a proud family, and not generally credited with sympathy for the laboring classes. Said he, "Every man has the undoubted right to struggle for his own success, at whatever cost of inconvenience or failure to others ; but the expediency or propriety of the matter is a question to be determined in each instance." According to this theory, success would undoubtedly follow the possession of the greatest resources or powers of endurance. Adopt this principle as the rule of action, and the propriety or expediency would be little discussed ; the struggle of man against man, and interest against interest, would be bitter and exhausting ; the very principle upon which our social system is founded would be disregarded and violated ; man, thrown back upon his natural rights, would subvert the general good, that his individual benefit might accrue. This proposition is the basis of Feudalism, worthy of its aristocratic author, and can only be construed to justify the strong in a struggle against the weak, which, whenever it occurs, leaves the strong, stronger and more arrogant, and the weak, weaker and more embittered than before.

This question is aggravated by the injudicious efforts of the zealous and well-meaning persons, who, with a misconception of the most delicate relations which the different classes of society bear to each other, continually represent poverty as the greatest of human misfortunes, and an un-mixed evil.

If it be true, then should the possession of wealth be the height of earthly happiness and the goal of man's ambition.

Not having realized in their own experience what it is to be even in straitened pecuniary circumstances, they have unbounded sympathy for those who do not share in their abundance, and suffer its expression to degenerate into a morbid sentimentalism, which defeats its own best aspirations, and begets only discontent and agrarianism.

In the scarcity of positive information and data from which to form just conclusions, it is obvious that errors will arise; but in the general attention which the subject awakens, we find our greatest encouragement of the ultimate amelioration of the condition of the sons of toil.

If you will take up the report of the labor statistics of this Commonwealth for the last year, and have the patience to examine it carefully throughout, you can scarcely fail to receive the impression that everything in our State that pertains to labor is all wrong. Agriculture languishes, and our farm laborers leave the rural districts for the superior inducements afforded in the manufacturing towns; and yet our artisans and operatives are ill-paid, and as poorly sheltered.

In the \$163,000,000 deposited in our savings-banks by 560,000 depositors, are seen no evident signs of thrift or prosperity. It argues that as no mechanic or laborer can, by any possibility, save \$500 in one year, should one chance to deposit so large an amount in that time, he is, of necessity, a capitalist or a master mechanic, and not a laborer for wages. With more than one-third of our population having savings on deposit, and three-fifths in the enjoyment of sufficient

property to attract the attention of the assessor, for taxation, it asserts that the wages of labor are inadequate to the support of the laborer and his family. It assumes, that for one to gain and hold a year's income in reserve, is to take himself out of the laboring classes, because he is not immediately dependent upon his daily labor for his daily bread, which sufficiently proves that labor and poverty must necessarily be attendant one upon the other.

This report contains an instructive mass of statistics, computations, averages, statements, and suggestions, drawn from every imaginable source, from the census to the celestial. Its records of fact are a valuable contribution to industrial statistics, and the care and labor bestowed upon them cannot be too highly commended; but its theories and deductions are open to criticism, if not to animadversion.

If its tables of wages at various times are correct, by assumed and arbitrary estimates of the supplies consumed in the family, it would appear that the great mass of our operatives, laborers, and journeymen mechanics have been continually growing poorer and poorer; or, to use the language of the report (p. 538), "The great body of working people, from the date of the organization of wage-labor, has only kept along on a general level with their earnings, — they, however, barely paying their way, and being oftener in debt than out of debt." Curious result; it proves too much; the experience of the community is against it, and the report itself, on a previous page, tells us that "Industry prospers, because so many can afford to buy." The testimony of every

grocer, provision-dealer, or trader in any of the commodities consumed in the family, is uniformly that the humble laboring poor, our mechanics and operatives, know better what they want, and pay better for what they have, than the classes who call themselves genteel. If all the facts were known, it would, I doubt not, be ascertained that it is not among the laboring class alone that those are to be found who fail to live upon or within their income, but oftenest among those who live in a more pretentious style, and who would resent the intimation that labor was essential to their support. Is it necessary, in order to show that some classes of labor are not adequately remunerated or provided for, to assert that the great body of those below a master-workman have been oftener in debt than out of it, for seventy years; thus, drawing the balance of their support from their neighbors, by compulsion, and being consequently worse than paupers, or hardly better than knaves?

In a political convention two or three years ago, where the labor-reform question was discussed, it was found that of two delegations, consisting of nineteen persons, all but one had served an apprenticeship and wrought as journeymen; although, from small beginnings they had all advanced to a competence, and some to wealth.

The mechanic arts of this State, to-day, are in the hands and under the control of men who began life penniless, who have actually wrought their fortunes out of the solid stone, wood, and iron. To the truth of this statement scores who are present here to-day can bear me witness. But we find no

enumeration of the multitudes who have lived and wrought contentedly, who, by frugality and thrift, provided for their families comfortably, on much smaller wages than have been pronounced inadequate, and laid by something for adversity and the acquisition of a homestead.

It was my privilege to dwell for twenty-five years in the home of a journeyman mechanic. Having by years of toil acquired a small property, he ventured into business for himself, but the commercial revulsion of 1840 swept away his substance and left him penniless and almost destitute. Gathering together a few of his household goods, he took his little family and came to this city, where, with an income that was at first but \$1 per day, which at no time exceeded \$2.50, and, including loss of time by illness and want of employment, did not average \$1.50 per day for over twenty years, he supported a family, consisting a large portion of the time of five persons, comfortably and even generously. Eight years of industry and economy enabled him to acquire the equity — small, it is true — in a homestead ; subsequently he added a little plot of land that he might gratify his taste in the cultivation of fruits and flowers. His wants were few and simple, and the care of his garden furnished his favorite recreation. That unpretending home was the abode of temperance, contentment, and peace ; there were no envyings or grievings at the goods or abundance of others, but, morning and evening, the prayer of thankfulness ascended to the Giver of all good, for his mercies and benefits. Sickness, long and wearisome, came with its heavy burdens ; death, too, with its bitter sor-

rows, made its vacant places in home and heart ; still arose that father's grateful prayer, as he toiled steadily on. There was another in that household, — a patient, careful, loving mother, — by whose frugality and tact much was often made of little, and to whom wastefulness was unknown. By her, were instilled into those young hearts, lessons which are nowhere taught so tenderly as at a mother's knee, lessons which lead to lives of usefulness, and that "faith, like an anchor sure and steadfast, which leadeth within the veil." Encouraged in their studies, they made suitable proficiency in the public schools, and were there qualified for wider and more active duties in life ; but whether in school or sanctuary, they were found in their accustomed places with equal regularity.

In that home the poor and distressed found comfort and relief, and none were turned empty-handed away. Death came at last, and found that father at his labor. Borne from the bench to the bier, he left a character for temperance, industry, and integrity, as a precious legacy, and of him it might truly be said that, "without any estate or gainful calling, he reared a * * * family reputably."

To-day, the only survivor of that once happy household, as I look back upon its scenes of peaceful enjoyment and unalloyed content, I can truly and deeply feel that success is only comparative ; that he is the most truly successful who adds his contribution to the productive forces of the community ; gauges his wants by his ability to acquire ; trains his offspring for a higher sphere of usefulness ; and,

dying in the assurance of a blessed immortality, leaves them the tenderest remembrances of a happy, cheerful home.

Standing upon the banks of the St. Lawrence on a summer's day, we see a body of water inconceivable to the imagination, and to be comprehended only by the aid of figures, estimated to be more than 150,000,000 of gallons per minute, — a volume which would supply the city of Boston for eight days, — passing in a moment of time, swelling grandly to the sea, bearing on its broad bosom at once the ocean steamer and the lumberman's raft. How many would imagine that the sun and air, by their unseen but potent agencies, were quietly absorbing from the surface of the lakes which form the sources of that river, just twice the quantity which so amazes us by its immensity ! We see the river to-day, to-morrow, or a year hence ; it is still the same broad, deep, rolling stream, hurrying onward ; we do not perceive that other river, greater in volume, which ascends on its mission of regeneration, peacefully and mysteriously dissipating into clouds, to soar away, until, distilling in gentle showers, it moistens the parched soil, gladdens all nature, and causes the earth to give forth her increase. So, as we look forth upon the swelling tide of humanity struggling and toiling around us, by all the means we have to estimate it, the mass appears the same, but we fail to appreciate the multitudes who have been quietly and continually promoted to higher posts of duty and broader spheres of usefulness.

It is neither politic nor sensible to undertake or advocate reforms by indiscriminately decrying established usages or in-

stitutions ; it is far easier to embitter prejudices than to correct abuses.

The labor question, as generally agitated, resolves itself into a very simple proposition, — that every one will endeavor to procure the greatest possible return for the least amount of toil ; and unemployed leisure, although coveted and sought, is not desirable or advantageous either to the individual or to the community. The cupidity of man will always tempt the strong to oppress the weak, and this is no less true of individuals than of corporations. The laborer is worthy of his hire, and the hire should be worthy of the laborer. If the tenements furnished by individuals or companies to their operatives are unsuitable or unwholesome for habitations, we have laws already which would require their owners to render them habitable at once, or cause them to be condemned and vacated.

There can be no legal enactments regulating the duration or compensation of one's labor.

Laws may punish dishonesty and fraud, but they cannot be made to prevent men from driving hard bargains ; they may confine the criminal, but fail to effect those moral and social conditions of life which, while they promote present gratification and enjoyment, but too surely foster crime. While men postpone repentance until the hour of dissolution, they will disregard all duties which conflict with present comfort or accumulation, even though their failure should precipitate us into the direful consequences of domestic disorder. So we, as a community, may unconsciously permit and con-

tinue an unnatural condition of the relations of business and industry, which may promote the present prosperity of the majority, giving them wealth and luxury, while they bring only penury and privation to a large minority. Judged by Lord Derby's philosophy, this seems to be right; measured by the democratic precept, which has caused so much of oppression and sorrow, "the greatest good of the greatest number," it still holds good; but tested by the golden rule, which men will yet find it profitable to apply to all their transactions, "do unto others as you would have others do unto you," and we then realize that no community, however prosperous, can afford to allow any of the humblest of its members to suffer real or fancied grievances without doing something to remove the cause. This cannot be done by any utopian schemes or spasmodic labors of philanthropy, which are seldom made until the time for prevention has passed. The revolutions of society have generations for their cycles, and the philosophy of life can only be understood by comparison of cause and effect extending through a long series of years; this creates the necessity for records and statistics, and that watchful observers should register the ebb and flow of daily life.

The general government has, with wise provisions for commercial interests, detailed its signal corps, — men trained to watch the movements of the adversary in war, — to note the adverse movements of the elements in time of peace. Dispersed all over the land, they watch the rise and fall of the barometer, the moisture of the air, fall of rain, direction

and force of the wind. These data are recorded and concentrated before an experienced observer, who is thus enabled, with his practised eye, to see the storm-waves vibrating over the face of the earth in gigantic oscillations. Long-continued observation has shown him that mountain ranges, coasts, and valleys regulate the flow of the atmospheric currents, and direct the course of storms. It is by these means that the weather probabilities are sent abroad to every town and hamlet within reach of a telegraph or newspaper. We are told on the morning of a crisp autumn day that cautionary signals are ordered at Buffalo, and to be discontinued at Milwaukee, and that there will be a falling barometer in New England, with milder weather. Sure enough, the weather grows warmer ; that familiar wind sets in, which the weather-wise predict will blow up rain, and the next day comes our well-known south-westerly storm : the observer had watched its progress from the Rocky Mountains, recognized its familiar features, and could predict, with positive certainty, its rate of progress and ultimate destination.

This Association should have its own observer, watching the signs of the times. Calm, dispassionate, free from theories or dreams of hastening the millennium, he should carefully observe the elements of our social and business life, and its changes for better or for worse. Accredited as our agent, he would have unsurpassed advantages to pursue his investigations in fields that have been and must of necessity be otherwise closed to the public eye. If this be done liberally and conscientiously, a few years will give us surprising

results, and we should soon have some of the conditions without which little advance can be made in solving the questions arising from the relations of labor.

We must endeavor by all means to cheapen the cost of living; it is better to accomplish this than to raise the wages to the same extent. For this purpose our railway system, now measuring 1,600 miles and costing \$70,000,000, should transport, at the very lowest rate, articles of food, and those who labor, when going to and from their employment. Everything should be done by free markets or similar measures, to diminish the number of those who stand between the producer and the consumer, each taking his profit without adding to the value of the merchandise. So reckless and wicked have become the practices of some of these, that they will wantonly suffer half of their perishable goods to decay and go to waste, rather than abate the price upon what they sell. It is notorious, that loads and loads of fruit and vegetables have thus gone to the swine or the compost heap, as the result of some corner in which the dealers in cabbages have been emulating their prototypes in the corn or stock exchange.

The English and German manufacturers have been successfully trying the experiment of withdrawing their establishments from the large centres of population, with their allurements of vice and dissipation, to some quiet rural spot where the free air of heaven comes sweet from the fields, and where the landscape and garden furnish a continued pleasure to the eye. Habitations are furnished that are not only

comfortable, but attractive and home-like; amusements, which elevate and instruct, while they furnish wholesome diversion; lectures and schools for instruction; chapels for devotion; hospitals for the sick, and a quiet, welcome retreat for the decayed and superannuated, who, having spent their lives in toil, would otherwise find themselves, by stress of circumstances, stranded upon the shores of time, dependent upon charity for support in their declining years. These asylums are sometimes supported by a slight tax paid by the operatives themselves; at others, by the proprietors, who regard them as a part of the reasonable expense of their business, — not as a charity, but arising from the obligation to care for faithful servants when overtaken by misfortune.

Participation in the profits of business, based upon the length of service and degree of application on the part of the operative, promises and has realized the best results. These methods are susceptible of wide and useful application, and are in keeping with the character and temper of our people.

The principle of coöperation among workmen themselves in the conduct of mechanical operations, has been singularly successful in European countries, while it has been equally disastrous with us. This arises from no want of able men, but from their rapid promotion. Where the opportunities for advancement are few, and the depressing influence of caste wide-spread, there are to be found, in the humblest walks in life, men with fixed integrity of principles, and great powers of administration. Such men have been entrusted with the management of large affairs by their fellow-

workmen ; they have not been impeded or over-ruled by those with more zeal than knowledge, and they have made the coöperative stores and factories of Great Britain commercial powers, and are furnishing timely relief to thousands of their fellow-workmen.

In this country the change is manifest ; every man imagines that he is a born leader ; where there should be one head, two hands, and two feet, they would have four heads, one hand, and no feet ; they object to a menial duty, because that is degrading. The result has been witnessed. Nearly thirty years ago a vigorous effort was made to establish co-operative stores, under the name of the New-England Protective Unions ; they were started as associations, with just enough of secrecy to make them fascinating and attractive. There were not so many Masons, Odd-Fellows, Sons of Temperance, Good-Templars, Native-Americans, Leagues, Orders, and Knights as there are to-day, and the societies spread rapidly and flourished greatly. From their contributions and assessments they formed a capital, purchased goods, and opened a room on Saturday evenings ; the brethren issued the goods, at a small advance above cost, to members' families, exclusively for cash ; business increased, and they enlarged their rooms, opened them on Wednesday evenings, then Wednesday and Saturday afternoons, and, finally, after a few months, the store was open the entire week, with its superintendent and clerks. Trade was prosperous, and the membership and capital grew rapidly. Soon the different unions formed a confederation, chose a journeyman tailor as

their general purchasing agent, and in his little back shop they consolidated their orders and sent him into the market to buy their goods on their own account. Their selection fell upon a good man, upright in his dealings, called by the trade a shrewd buyer; his time was soon so much occupied that he was voted a salary, which was finally changed to a commission; a central store was opened, and for a few years everything flourished; the unions numbered more than one hundred, and their annual dealings with the general agent amounted to \$1,000,000, which was not more than one-half of their trade. Their prosperity proved their ruin; while it was up-hill work there was a careful supervision over the agents and the funds; but with success came negligence and looseness of accounts; the charge of affairs fell into the hands of men who always managed their own business to death; cliques sprang up, for where there were three or four irrepressible parties, only one could prevail. The inevitable wire-puller saw that in an association of two or three hundred humble and inexperienced men was an excellent field to ply his arts for political purposes, and he succeeded; the funds of the unions were dissipated, squandered, and stolen; the societies broken up, many of them bankrupt, and the members who were personally liable took charge of the wreck; some were continued as private stores, and the general agent lost large sums by his advances of goods to unions before they were known to be insolvent. Gradually the whole system faded away, and left him with a large trade, well established, and he is to-day a prosperous, wealthy, and respected commission merchant.

Twenty years ago a large mechanical establishment was founded on the coöperative principle in this city ; its members had all the incentives that come from self-interest ; the officers were men of ability, and as much integrity as such men will average. The enterprise prospered for a time, until the managers found that they could as well conduct a business for themselves, for their own exclusive benefit, as to share the profits with others. Actuated by the universal law of self-interest, they deserted their associates, built up a new concern, and left the old one to languish and die disastrously.

By a law passed in 1866, seven or more persons were authorized to form associations for manufacturing or trade, with certain restrictions and privileges. According to the returns made to the Secretary of State in November, 1869, there were 25 such coöperative associations, having a total capital and other property of \$190,979.78, and liabilities amounting to \$108,909.47. Some of these have already become bankrupt, and the law has since been repealed.

If we would influence posterity most deeply, it must be done by the instruction of the young. We have teaching and instruction enough in our public schools. We want in addition, training and culture, — that matter-of-fact kind of knowledge which guided our fathers with its unerring truth, and without which even great scientific attainments and technical proficiency become unwieldy and plague their possessors.

No amount of knowledge can be made practically useful in the business of life, that is not based upon a good, sound substratum of common sense. Confused by too much learn-

ing, men are every day working out the most absurd conclusions, which a little practical judgment or experience would demonstrate in a moment. I find it to be no uncommon thing, and not considered discreditable among the graduates of our higher institutes and schools, to offer it as an excuse for not comprehending either some new problem or a novel combination of old ones, "that they did not study that at school," or had only learned it to be forgotten.

We must train the young to habits of independent thought and careful observation of the physical and social conditions which surround them. Burdened with unmanageable learning, they degenerate into abstract theorists or visionary schemers. We must teach them self-respect; not that insolent assurance, which, in the language of the street, is aptly called "cheek," but that conscious dignity which becomes a freeman invested with the proudest privileges which the world has ever known.

With the rapid increase of numbers, comes a corresponding decrease of the ratio of the individual to the whole; it entails the deadening effect of conscious insignificance, which continually counteracts that confident self-reliance which is as essential in working out one's fortune as any other element of character, or skill in handicraft.

Encourage the children to be useful and industrious; show them how to live, and you have secured the happiness of the next generation. There is more in the art of living than is generally thought of. In this country abundance and plenty have engendered wastefulness and extravagance. A French

or German family will subsist comfortably on what is wasted in many of our homes, and would fare sumptuously where American families consider themselves stinted, if not starved. This art of living is better understood by some than by others, and is the true secret of many an individual success.

Encourage honesty, because it is the better principle. If it is inculcated as the best policy, the tempter invariably debates the policy just when and where it is most alluring, and the risk of evil consequences apparently smallest; he is an artful debater, and too often prevails, to the sacrifice of honesty, family, friendship, and the future.

Where the river flows broad and calm, with its shallow shores, there we find a solitude unbroken save by the gun of the sportsman, or the lonely cry of the loon; but where the fall and rapid vex its current, there gather the busy throng of workers, with the hum of industry, changing its waters to a perennial stream of wealth and prosperity. I have walked through the busy streets of a strange city, and, unacquainted with its commerce or sources of industry, have wondered how and where its swarming people gained their livelihood. The appearance of their homes and children denoted comfort and thrift, but the noon-day bustle of its streets, or the noisy clatter of its looms and hammers, failed to impress me with an adequate sense of the sources of subsistence for so great a multitude. But when I go to the warehouses and docks; when I see them piled high with bundles and bales, packages and cases, all gathered from these various laboratories; when I see steamers, ships, and

barges loaded with merchandise, and the laboring engine drawing its long train of burdened cars ; when I consider that without manufacturing industry and enterprise, all this commercial activity would cease, and stagnation brood over all our ports, then I get an adequate notion of the magnitude of their interests and sources of wealth.

Thus is our attention more engaged with the operations of commerce, because of its greater apparent activity, although the quiet and unassuming labors of the artisan and the mechanician, which we so readily overlook, are all that give it life. We believe that these agencies will ultimately achieve their perfect work, each with their respective functions weaving the web of life in all its varied patterns, with its peculiar thread, until there shall finally be accomplished the emancipation of the oppressed, the relief of the distressed, the ennobling of man, and the glory of God.

THE
 TWENTY-SECOND TRIENNIAL FESTIVAL
 OF THE
Massachusetts Charitable Mechanic Association,

WAS CELEBRATED AT THE

Music Hall, on Monday Evening, Oct. 21, 1872.

The members of the Association, with their ladies and invited guests, assembled at half-past six o'clock in the large hall. The Germania Band enlivened the early part of the evening, and the intervals, with the performance of choice selections of music. The Temple Quartette Club sang very acceptably a number of odes, and led the audience in the following, written by Epes Sargent, Esq., for the Festival in 1848.

ODE.

God bless our native land !
 Prosper the toiling band
 Of every clime !
 Bid all good efforts speed,
 Whether by word or deed,
 Till all mankind are freed
 From want and crime !

Oh ! if to earth is given
 One certain type of heaven,
 One sacred fire, —
 'Tis when the kindling sign
 Of Charity divine
 Glows on the true heart's shrine, —
 Glows to inspire !

Then, Lord, our fathers' Lord,
 Thy gracious smile accord.
 Thy Spirit send !
 Quicken our faltering zeal,
 May we, in woe or weal,
 For others' suffering feel,
 Feel, and befriend !

We of ourselves are weak,
 But in thy love we seek
 Wisdom and might :
 All that is good in Art
 Thou and thy works impart ;
 Grateful be every heart !
 God speed the Right !

The President, ALBERT J. WRIGHT, gave an address of welcome, seasoned with much wit and wisdom, and the Rev. GEORGE W. BLAGDEN, D.D., invoked the Divine blessing upon the institution, and prayed for its success in every good and holy enterprise.

The address, by HENRY W. WILSON, Esq., occupied nearly an hour in its delivery, and received the marked attention and spontaneous approval of the audience.

A collation in the lower (Bumstead) Hall, followed the services above, and a Social Gathering of the families of members and their friends, at which dancing was introduced, was held in the large hall.

The duties and the pleasures of the occasion were brought to a close at about eleven o'clock.

Massachusetts Charitable Mechanic Association.

13-

Twenty-Fourth Triennial Festival.

A D D R E S S

OF

WILLIAM H. SAYWARD,

WITH SOME ACCOUNT OF THE

PROCEEDINGS AT THE FESTIVAL,

NOVEMBER 13, 1878.

★ MASS. HIST. SOC.

B O S T O N :

PRINTED BY NATHAN SAWYER & SON,

No. 70 STATE STREET.

1 8 7 8.

THE NEW YORK
PUBLIC LIBRARY
SP 27267
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1898.

CORRESPONDENCE.

Boston, December 14th, 1878.

WILLIAM H. SAYWARD, Esq.,

DEAR SIR:— I have the pleasure to furnish you with a copy of a vote adopted at a recent meeting of the Government of the Massachusetts Charitable Mechanic Association.

It was, on motion,

Voted, That the thanks of this Board, in behalf of the Association, be presented to Mr. WILLIAM H. SAYWARD, for his pertinent and valuable address, delivered on the occasion of the celebration of the Twenty-fourth Festival, and that a copy be requested for publication.

I am faithfully yours,

JOSEPH L. BATES,
Secretary.

Boston, December 20, 1878.

DEAR SIR:— Your note of the 14th inst., conveying vote of the Government of the Massachusetts Charitable Mechanic Association, is at hand. Absence from home prevented earlier acknowledgment.

Thanking the Association most sincerely for its kind approval, I have the honor of herewith submitting a copy of my Address.

Yours, very truly,

WM. H. SAYWARD.

TO JOSEPH L. BATES, Esq.,

Secretary M. C. M. A.

A D D R E S S .

THE honor of delivering the Triennial Address before this venerable Association has usually fallen into older and wiser hands than mine ; but, while I shrink from the attempt to fill this position as they have filled it, I am inspired by their words and example to give you *my* best thought and word on this happy occasion.

There is, too, a nameless thrill of pride in standing in this place at this particular time.

The largest and most successful exhibition ever held by this Association has just closed, and within these walls has been spread the finest display of the mechanical arts and their products ever offered in this country, with the single exception of the Centennial Exposition, two years ago, at Philadelphia.

In the face of discouragement and difficulties beyond expression, this exhibition, which was looked upon with doubt, even by many members of the Association, has been carried to a successful issue, and this Society which, for more than eighty-five years, has so well represented and advanced the industries of its own and neighbor States, has added new laurels to its fame ; and those of its members who have worked so persistently, in spite of opposition, for this grand success, deserve and receive the heartfelt thanks of the Association and the community.

Being here, then, in this particularly auspicious time, I feel a longing for the grace of diction, and grasp of thought, of those who have filled this position before

me. I feel the need of all the eloquence of an Everett, all the historical lore of a Bullock, all the fire and originality of a Slack, all the statistical accuracy of a Wilson, all the fervid imagery of an Emerson, to meet the exigencies of this occasion.

Living in an age of unexampled progress, we seem to be, at the present time, in a grand focus of discoveries and inventions.

When the last exhibition of this Society was held in 1874, it seemed to many, no doubt, as though the limits of invention had been reached. Two years ago, at Philadelphia, we saw still greater onward steps, but within the *last two years* some of the most marvellous and apparently impossible inventions have astonished the world!

The most cursory glance at the exhibits in the various departments of this building could but have satisfied the least attentive visitor of the great advance that has been made in almost every field of work, but a close study of the numberless branches of industry here represented fills the mind with admiration and wonder, and prepares us for the almost limitless possibilities of the future.

The silver-tongued orator of Massachusetts has held thousands upon thousands entranced and delighted with his story of the Lost Arts, the marvellous visions which his matchless word-painting has raised, thrill and excite the imagination until the dim haze of remote antiquity is irradiated with dazzling achievements, such as the dull inhabitants of this lack-lustre age can never hope to parallel, much less surpass.

But, if once infused with the enthusiasm of the PRESENT, he should persuade himself to illustrate, with his wonderful powers of delineation, the New Found Arts, with whose mysteries we have been standing face to face for the last two months, he would weave a tale

of picturesque romance and splendor that would almost delude us into believing it was a story of some happier and more enlightened sphere than this poor world of ours.

I cannot but feel assured that the multitudes that have passed in and out among the crowded spaces of this vast building must have been deeply impressed, not only with the degree of perfection to which the various branches of mechanical art have been brought, but also with the boundless opportunities and possibilities that lie before us.

What human mind can pretend to look into the dawning light of what is to be, and compass with his dull comprehension the developments of the open day? Rather do we stand hushed in awe, and wait with bated breath, the inevitable victory of mind in its perpetual struggle with matter.

To whom do these visitors, from all parts of our common country, owe this opportunity of studying the advances made in work and art?

An Association of mechanics, whose original purpose was the promotion of certain objects affecting their general welfare, was formed in this city in the year 1795. Its history is very like that of all Associations that have a vital principle within them; difficulties and opposition met with courage and determination, misunderstanding and doubt met with demonstration, and all powerful success secured at last ample recognition and the respectful admiration of all classes in the community.

The progress of time, and with it the advance and growth of thought, widened its possibilities, and the wisdom of its managers saw still greater good to come than the first restricted purposes which prompted its foundation.

Having successfully established these first vigorous roots of their infant organization, they soon felt stirring

within them the sap of progress, and every year saw fresh shoots and branches from the parent stem.

There has been no season which could fairly be considered a time of stunted growth, but rather continual advance, and as "nothing succeeds like success," the encouragement of society has cheered and strengthened it until to-day we stand in the glowing sunlight of its noontide beneficence, and reap and enjoy the results of its persistent efforts for the advancement of the Mechanic Arts.

To this Association of workers, society owes many of the improvements which add to the amenities of life, and will continue to owe them; for as in the past its field of usefulness and its fostering care have spread in every direction, so in the future we can but feel that its radiating and protecting arms will never shrink into useless members, but constantly extend and strengthen, blessing the unfortunate with its charity, protecting and encouraging all the useful arts that benefit and advance mankind.

Consider with me, if you will, some of the more important points of interest which have been offered here for our instruction and enlightenment.

Among the thousands of objects of interest and value to each and every individual, there must, of necessity, be some few which affect us in a larger way, and which are of wider scope than our immediate and particular good. Of such objects as these, which affect the mass of society the world over, the use of electricity as light, is, to my mind, one of the most important. Early in the century, the idea of producing light from electricity was experimented upon, and, in 1813, Sir Humphrey Davy is said to have formed a continuous arc of light between carbons. From that time to the present day, it is surprising to find how much time and money has been expended in following out the idea, the research proving

all the more fascinating as the object to be gained eluded the grasp of the experimenter.

That light could be continuously produced has long been a demonstrated fact, but the great obstacle seems to have been the cost of production by the galvanic battery, and the apparent impossibility to divide the light. In spite of these difficulties, the electric light was made practical use of twenty-five or thirty years ago, in various parts of the world, more particularly in mining and tunneling, and it is a curious fact that Spain, a country which we have been accustomed to consider very much behind the age, has been most active and enterprising in researches and experiments in this direction.

It would be impossible, in the limits of this short mention, to follow, at all accurately, the various advances made by Saxton, Pixie, Wheatstone, Siemens, Gramme, Jablokoff, Wilde, and a hundred others, whose names have become familiar to those who have read and studied this interesting subject. Our particular interest centres upon the discovery of the principle which has made possible the production of the light by a convenient and economical method, avoiding at the same time the disagreeable acid fumes caused by the use of the powerful galvanic batteries necessary in the old method.

In 1859, Mr. Moses G. Farmer, of Boston, familiarly known to our city as the inventor, jointly with Dr. Wm. F. Channing, of our present system of fire-alarm, now consulting electrician of the U. S. Naval Torpedo Station at Newport, first conceived the idea of using full electro magnets in a dynamo electric machine, thus making the production of the necessary force of electricity dependent solely upon the machine itself.

In 1866, he had carried his idea to successful completion, and though he was soon followed by others with

machines of a similar nature, to him, and to him alone, belongs the credit and honor of first discovery.

There are many interesting facts connected with subsequent experiments which I find it impossible to speak of for lack of time, the result, however, of the various improvements made, has been witnessed by you all, as shown in this building by two different methods during the Fair, and the merits of the light have been amply discussed.

The production of light by this great agent is but in its infancy, and there is, in my mind, not the least doubt that the coming years will see the present difficulties overcome, and the electric light in use throughout the world.

Other wonderful applications of this most subtle of Nature's forces demand almost equal attention, and we cannot but feel a thrill of delight and admiration as we hold that little instrument in our hands which transmits with such accuracy the very words spoken miles away. Simple in its construction and working, it seems strange that it was never thought of before, and yet, singular paradox, strange that it should ever have been thought of at all.

What a revolution this great invention has made; already from office to factory, from place of business to the home circle, to departments of public protection, from friend to friend, these silent yet eloquent wires extend, making the impossible of yesterday the possible of to-day. The pecuniary advantage to business of this discovery is simply inconceivable, while the convenience and security of domestic life is enhanced, and the opportunities for friendly communication multiplied equally beyond computation.

The importance of the telephone, in all its manifold applications, cannot be over-estimated; but before we have hardly begun to recover from our surprise and

astonishment at its wonderful achievements, we are presented with an additional development of the same principle, which so magnifies the sound that we can hear a fly's footfall at the distance of a mile, and a feather drawn over a smooth surface is heard with as great distinctness as the filing of a coarse saw.

Every day association, with wonders like these, may so familiarize our minds that we cease to wonder, and yet what one of the Lost Arts can compare with any of these latest found?

Entirely distinct from either of these last mentioned inventions, though somewhat related, is that piece of purely mechanical ingenuity, the phonograph. While its usefulness may not be so apparent, our amazement at its accomplishments is greater than before. We listen almost in awe to hear our very words in the self-same tone and accent as spoken, repeated back to us from a senseless piece of foil, and though the method seems clear to our understanding, our senses almost refuse to believe it even while we listen. The brain of the man, from which was evolved the idea of this wonder of wonders, seems to be an inexhaustible mine; hardly a week goes by that we do not hear of some new and startling invention, and the name of Edison may rightly be placed in the list of the greatest inventors of the world.

It would be interesting and instructive to speak in detail of many important improvements of recent date, which have been exhibited here, but the scope of this address will hardly permit such mention. I cannot, however, refrain from saying a few words upon one or two points that have directly appealed to me as likely to greatly affect the industries and welfare of the world.

The Knowles Open Shed Loom has been surrounded with admiring crowds during the whole exhibition, and yet but few have probably realized what a revolution

this peculiar adaptation has caused in the manufacture of fancy woolen goods. By a simple adjustment of the mechanism of the old loom, a complete change was accomplished, so that the weaving of the pattern was immensely simplified, and the cost reduced at least thirty-three per cent. ; yet, in spite of this self-evident gain, it has cost the inventor twenty long years of constant endeavor to have his method accepted, as it now is, as the best in this country, perhaps in the world. To-day he can proudly point to the use of his looms in all the important mills of this country, and another year will place them in the pre-eminent position they so justly deserve, in the manufactories of the Old World.

Akin to this is the advance made in textile art, as displayed by the Bigelow Carpet Company. It is not probably known by a twentieth part of the thousands who have gazed with delight upon the artistic fabrics exhibited by this company, that their mills are the largest in the world, and better than this, that the method of manufacture, of which they own the exclusive right, is a purely American invention ; it being an adaptation of the power-loom to carpet weaving by the gentleman whose name the company bears.

Their productions have already received the highest praise of the Judges at London and Philadelphia, and, since the opening of this exhibit, the award of the great exposition at Paris has been announced.

We, as Americans, may well be proud of the laurels won in this important branch of industry.

The development of the great oil regions of Pennsylvania, a number of years ago, seemed important at the time, simply as furnishing a new and cheaper method of illumination ; but this is by no means the whole gain, for persistent experiment has brought to light other properties lying dormant in petroleum, which promise to be of the greatest value to humanity. Aside from the

many mechanical uses which seem to multiply every day, the remarkable curative properties of this fluid that are constantly developing, are simply wonderful, and deserve to be more widely known, as they certainly will be in the future, than the modest place occupied in this exhibition would seem to make possible.

As I have passed among the bewildering number of new and strange machines and products of mechanical skill, I have felt the need of a new lease of life to be able to examine and understand the effect of all these inventions and improved methods of work upon the welfare of the world. Machinery of every conceivable variety, that performs its office with greater accuracy than the skilled workman, fabrics in cotton, wool and rubber, productions in stone, wood and iron, designs in precious and base metals, methods of atmospheric signaling, which would have effectually prevented the last horrible railroad disaster, applications of building materials and fire-proofing, drainage, and every department of household improvement and adornment, new devices for the protection of "those who go down to the sea in ships," providing safer and easier anchorage, equally applicable to yachts or the largest steamer, contrivances in agricultural implements and household utensils without number, improvements in articles of food and methods of preparing it, every department, in fact, full to overflowing. From the great Brown engine, so accurately and finely adjusted that its ponderous wheel, connected with seventeen hundred feet of shafting, has been able to revolve under a pressure of only five pounds of steam, though using seventy-five pounds when doing all the work required of it, to the delicate manipulations necessary to the cutting of a diamond; from the fiery jaws of a furnace which devours the wet peat of the meadow with as great avidity as the driest pine, to the chaste and elegant designs of the gold-

smith ; from the almost human machines for the lasting, crimping and finishing of boots and shoes, to the magical electric pen, the gradations are infinite, and challenge the admiration of all ; all minds alike commend, alike acknowledge the unceasing activity of human ingenuity.

It is not, however, on the merits of any particular exhibits that we find the greatest cause for pride in the success of this exhibition, but rather in the harmonious whole, manifesting as it does the desire of this Association to open an opportunity for those who have improvements to bring them in the most attractive and telling manner before the public, and to give the public a comprehensive view of the advance of the arts and sciences, in limits of time and space such as would be impossible for them to accomplish in any other way.

It is easy to conclude that the good done to the world at large, by such exhibitions as this, is incalculable, for we can readily see that each new idea suggested to the individual visitor does not stop with him, but goes out in constantly increasing circles in the sphere of life which he may occupy.

The increase of interest, manifested by the public, seems to grow with every effort made to improve its opportunities for becoming acquainted with the mechanic arts.

The first exhibition or fair held by this Society was in the year 1837, and was open only about ten days.

The two succeeding Fairs were at intervals of two years, then several intervals of three years each followed, then four and five years elapsed ; the irregularities being caused by the war and other disturbances.

It is worthy of note, that, with hardly an exception, there has been a steady increase in the value of the exhibits, in the interest of the public, and in the financial success, thus encouraging the management to renew

and enlarge its exertions with every recurring exhibition. The time of holding the exhibition open has gradually been extended until the ten days of 1837 have become sixty days in 1878, and the wisdom of the managers is amply exemplified.

The largest attendance at any previous fair was in the vicinity of two hundred and twenty-five thousand, and, this year, we can record the very gratifying increase to three hundred and fifty thousand.

It is also interesting to know that the two elevators, erected by the Whittier Machine Co., have carried upwards of three hundred thousand passengers.

As a financial success, this present effort exceeds all others, and the liberal outlay, which at first seemed to many as bordering on extravagance, has proved to be a wise forethought and a generous economy. Parsimoniousness in the operations of such a Society as this can hardly be considered good management, and the present unquestionable proof of the wisdom of providing, as liberally as possible, for the accommodation of both exhibitors and visitors, should establish the fact for all future exhibitions.

That such gratifying results should be possible, at such a time of depression as the present, is, in itself, a cause for gratulation and inspiration. That at the close, as we hope, of a period of stagnation unparalleled in the history of this country, so much vitality of the working world should be displayed, is really astonishing, and there can be no better proof of the sturdy character of all that pertains to this branch of the world's industry. The dull times, instead of crushing out all ambition, has rather seemed to fire it, and the enforced quiet of business has been taken advantage of, by the restless inventive faculty, to better pursue its researches than ever before. I think it is safe to say, that, during the past five years, greater advances in

improved machinery, and, in fact, all methods of work, and applications of mechanical skill, have been made, than in any previous ten years of the century.

Before leaving the immediate consideration of this exhibition, which has so triumphantly vindicated the wisdom of those who favored it, I wish to congratulate the Association upon the prominent and important position occupied by the Art display. It is one of the most promising facts, in connection with the advance of the mechanical industries, that a taste for the beautiful is becoming so manifest.

The very machines which a few years ago had but little attractiveness in their cumbrous and clumsy contrivances, now please the eye with graceful forms, and exquisite finish, which shows unmistakably the growth of the æsthetic taste. It is also noteworthy that a more attractive, more beautiful design, has sometimes developed a better adaptability than some of the ungraceful first thoughts.

First, usefulness, then beauty, seems to be the sequence, followed by even the most ponderous of inventions, and it is worthy of commendation when the inventor or mechanic, after fixing and exemplifying his idea, seeks to make it also a thing of beauty.

The engine which has provided the motive power for all this machinery is almost as beautiful as a fine picture, even to the eye of the ordinary observer, and yet a few years ago there was little to attract in the outward appearance of a steam-engine: now, the massive rod which moves with such resistless force is made to appear almost delicate, by its perfectly graceful lines and brilliant polish, and the various parts that seem to throb and lift as if endowed with human sense, seem better able to perform their work from being so neatly and admirably finished.

At the Centennial Exhibition, I noticed particularly

the graceful lines of almost all the agricultural implements, the curve of beauty being almost always adopted in place of the square hard lines of the past, and almost invariably the change was a double benefit to the machine.

I claim that this growth of taste must be traced to the more frequent contact of the masses with Art in all its forms, and the efforts of the managers of this Fair, in this direction, deserve especial appreciation, for certainly never before in this city has there been such an extensive and valuable exhibition of paintings and engravings, or such a display of exquisite specimens of ceramic art.

The atmosphere of this building is so full of the suggestions of the past two months that I have been led to say rather more than I at first intended in this direction. Leaving now these reflections, I will ask your kind attention to a few very crude thoughts in relation to the Mechanic Arts; their Necessity, Universality, Strength, Honesty and Beauty, and the Mechanic, the Man; his Possibilities, Position and Patriotism.

When man, as an intelligent being, no matter whether by simple creation or gradual stages of development, found himself on this earth in a distinct superiority to the brutes, he was obliged to recognize latent powers of his being which would not be hushed. The brutes he found were satisfied with silencing the cravings of hunger, and, in common with them, he felt *that*, as a first demand, but unlike them he could not stop there. A desire to clothe himself next appealed for consideration, and in a rude way he began to utilize the skins of the lower animals, whose flesh had already served him for food, to cover his naked form from the rude blasts.

This may be considered as the birth of the mechanical instinct, for simple and natural as the action was, the result was a manufactured article; that is, a substance turned from the channel which nature had provided, and

made to serve a different purpose for the better convenience of man. All manufactures from that remote time are simply following out the same principle, the transferring of earth's simple contributions into more concrete and available conditions, to meet the needs and pleasures of mankind.

Through what devious ways we might be led, if it were possible for us to trace this one peculiar branch of manufacture, from the rude yet effectual covering of the savage, to the delicate and dazzling products of the looms, whose busy fingers are forever spinning and weaving in the numberless mills of the world. The necessity for meeting other needs than those of a merely blind animal desire, must have been coeval with the sentient being of man; no sooner had one want been met than others sprang into birth, clamorous for recognition, and the oft repeated saying, that "the more we have the more we want," must have been one of the earliest conclusions of primeval man.

For the sake of argument, it might be urged that the necessities of man at that time, or any time, were really only what he became accustomed to, and if he was only accustomed to life, as an animal, his needs would be the same as an animal. But we cannot think of man *as man*, without throwing still farther into the dusky past that "missing link," which all the skill of a Darwin fails to discover, however reasonable the balance of his theory may be.

UNIVERSALITY.

We find man, then, a reasonable being, stretching out on all sides, from pure necessity, for helps and props to his better existing.

Implements of hunting and war were evidently among the first fruits of his skill, and, as before, we

considered the advance made in clothing ; how interesting to compare the first rude club, or bow and arrow, with the Krupp gun, which hurls a shot of a thousand pounds through twelve miles of space, or the more individual arm, the breech-loading and repeating rifle, which makes its holder the equal of a score of enemies, with poorer means of defence.

The effort for self-protection, first manifested in means and weapons of the war and chase, became developed in other directions in intervals of peace, and manufactures of superior devices and utensils must have become gradually universal, until, with each age, it seemed as if every department had been entered upon and fully occupied.

From our point of contact, we have arrived at the conclusion that there is no such thing as filling full any department or field of work, and we have almost ceased to be surprised with new developments, however strange ; we are even willing to believe, that the happy people of the future centuries will be in possession of comforts and conveniences, such as we cannot even conceive or dream of.

The field for the development of the mechanical faculty was early entered upon, and the advances made have so rapidly crowded each other that some Arts have been lost or forgotten ; but I claim that the Arts most useful to the human race have been preserved and improved, and will continue to be during all time. What loss is it to the world if we cannot make a scimiter of such fine temper and keenness that it will cut into a thousand pieces a floss of silk in mid-air, when wielded by a skillful hand ? The temper of a watch-spring is of infinitely greater importance, and has advanced the world's prosperity more than a whole universe of scimiters could have done. The Arts that have thus dropped out of the memory of man, because

they were crowded by better things, is another example of the "survival of the fittest," and while we may be enchanted with the manner of portrayal, even while we cannot say that it is "a tale told by an idiot," still we cannot but conclude that these stories of improbable skill in remote ages are often "full of sound and fury, signifying nothing."

Our interest in the wonderful works of the Past is not lessened by any greater importance we may attach to the methods of to-day, and in the presence of some of the relics of ancient industry we can but be struck with awe. Suppose a builder of this generation visits the great pyramids, — the grand scale upon which their plan is laid first fills his mind with admiration. A base of between seven and eight hundred feet square, laid in blocks so huge that he wonders how they could be handled, even on level ground, with the tools of those ancient days; but as he ascends, tier after tier, to the platform at the top, four hundred and eighty-four feet above the plain below, he is more and more puzzled as he finds blocks larger still than those at the base of these huge monuments of ancient kings.

If he explores the immense mechanics of the interior, he is astonished and delighted with their perfection, and the forethought evident in the arrangement of the ponderous portcullises of polished stone, weighing fifty or sixty tons, fitted so accurately in grooves prepared for them as the work progressed, that, in order to make their removal possible, it has been found necessary to drill and split a passage completely around them. It is, however, preposterous to say that it would be impossible for the mechanics of to-day to build a pyramid. We can be filled with astonishment at the feats accomplished with the primitive tools which they possessed, but given the necessity and the money, and we can erect a monument of as great dimensions, with equal

workmanship, and much greater ease than it could possibly have been done in those ancient days.

But there seems to be no particular demand for pyramids at the present time, the stock on hand being amply sufficient for our present wants, therefore my statement is in no danger of being disproved: I should not, however, have a very high opinion of the mechanic who would dispute it, in the face of some of the accomplished facts of modern mechanical skill, such as moving immense buildings without disturbing the occupants, or causing the least crack or settle in the change.

There is no need for us to build pyramids to establish the capacity and skill of the mechanics of our time; genius and talent exerted in other directions may produce results that will not cause us to despise the skill of the Present, when placed in comparison with the Past. An engine like the great Corliss at Philadelphia, two years ago, whose majestic movements seemed almost endowed with human thought, carrying miles of shafting, performing the work of a giant with as much apparent ease as we could draw a breath, is, in its relative effect upon the good and happiness of man, more satisfying than a hundred pyramids. I am a believer in to-day! I am sure that we are infinitely better, in our work and in ourselves, than our ancestors were, a hundred, a thousand, or ten thousand years ago! I believe that to-day, for the mechanic, is a good time to live. We may not be making money just now, but we are getting a great deal of experience, and "knowledge is power."

STRENGTH AND HONESTY.

It is almost an invariable rule that good mechanical work has in it an element of strength and durability, and it seems to have the faculty of transmitting some of

this inherent power to those who deal with it. The constant contact creates a certain sturdiness and poise of character which is its peculiar trade-mark.

The persistent truthfulness to the laws of nature which must be obeyed are self-evident in every department of mechanics, exemplified in the accurate movements of machinery, the erection of buildings, or the numberless branches of mechanical art, and we cannot but notice its effect upon those most conversant with its power. Self-reliance, decision, and certainty of action are natural out-growths from contact with the laws of force.

It might be easy to demonstrate how a failure to conform to the whole demand of natural laws is sure to betray weakness, and cause larger expenditure than the first economy aimed at. There is, for instance, no direction in which honesty and stability recommend themselves so strongly as in the erection of buildings, and this fact can be easily proved, by a glance at the rates at which companies are willing to insure against damage by fire or other causes. A contrast of the rates of insurance in London or Paris, with those of any of our American cities, demonstrates at once the value of superior construction. In London or Paris, buildings of exactly the same character as those of Boston or New York, are insured at less than one-half the rates we are able to obtain here, and this is traceable, solely, to the universal practice of fire-proof construction, and complete or nearly complete isolation of the different buildings from each other, and even of the different stories in a building. That we can show a few examples of as good construction is most true, but the practice not being general, we gain no advantage.

The story is told of a certain French builder, who, upon the completion of a new apartment-house, sent out cards to his friends, inviting them to a dinner upon the second flat, at the same time informing them that the

first story would be set on fire while they sat at table. The programme was carried out, and the merry party discussed their viands undisturbed, while the fire department was allowed to quench the flames below them as best they might. The truth of this story may be questioned, but it well illustrates the more perfect security which is possible by better modes of building, and while this story, as told, seems incredible, and possibly never did take place, I am informed by a person on whom I can rely, that buildings have been consumed in Paris where the staircases were so effectually protected that they remained intact from bottom to top, after the fire had completely destroyed all other parts of the structure. In view of the vast amounts that are paid for insurance in this country, it would be well for merchants and owners to consider the economy of better building, and give the mechanic an opportunity to demonstrate the possibility of something better than the many shams that are now such a costly disgrace.

Sanitary drainage is another question which greatly influences the reputation for thoroughness in building, so desirable to all who are concerned in it. This subject is a most puzzling one to Architects and Engineers, as well as Mechanics, and it is generally acknowledged that "the present condition of drainage is a disgrace to our intelligence, and a sorry reflection on our boasted civilization." Though this question has largely been considered the domain of purely scientific theory, I am confident that no satisfactory solution will be arrived at until the intellect and practical experience of the mechanic is brought into equal consideration with the demonstrations of the scientist, whose theories often look so well upon paper, but which are as often dispersed into thin air when brought to trial.

When the health of our city, which has had for years a world-wide reputation for cleanliness, is proved by

statistics to be hardly a fraction better in health than some of the most filthy cities of the country, and when one-fourth of our mortality is due to diseases which can be directly traced to defective drainage, it is incumbent upon us to bring all means into our service to cure the evil, and especially the mechanical ingenuity, which in its turn ought to devote its energies to genuine study and experiment.

The consideration of this question suggests another point which has almost as much influence upon work's intrinsic truth in the eyes of the world at large, as any other, and that is, the incompetency of commissions.

A large part of the public business of towns, cities, and the nation is put into the hands of special committees, or permanent commissions. There has been an immense amount of work and good done by commissions, and I would be the last to object to their establishment, for I believe in them; but what I wish to point out is the injury often done to the best class of work and workers, by the unfitness of many commissioners for the duties which they assume. Commissions should consist largely of practical men, one theoretical man is an ample supply, let the rest be men of practical experience, and we shall not hear of so many sham public works, similar to that reckless piece of business a short time ago at the Forty-Second Street tunnel in New York, where an arch of six rings of brick spanning forty feet, with a rise of only ten feet, was expected to carry a superincumbent weight of twenty-five to thirty feet of soil; the result, as ought to have been anticipated, was the destruction of the arch and the loss of human life. The same commission who permitted this to be done had in view the building of a retaining wall to support a heavy bank of earth one hundred feet long and *sixty feet high*, the wall to be only four feet thick at the bottom and two feet at the top; fortunately this piece of

folly was stopped in season to prevent another disaster. Such terrible blunders as these reflect severely on the value of mechanical work, and mechanics in general, while the commission too frequently escapes censure. While it is true that enough poor work is done for which the mechanic is solely at fault, it seems a pity that the added burden of the sins of others should be thrown upon the trade, bringing it more into ill-repute, and causing *all* its efforts to be regarded with suspicion.

Competent men *can* be obtained, and the public ought to demand that, in departments of practical work, we should have fewer lawyers, doctors, and merchants, and more intelligent and experienced mechanics.

Upon the strength and honesty of work, largely depends its

BEAUTY.

The finical ornament and superficial decoration which so often misleads the ordinary eye is, to the judgment of the skillful, not only inartistic and censurable, but an almost certain indication of the lack of solid qualities in the foundation.

Lines of beauty seem to be best exemplified in simplicity. The ancients were fully impressed with this truth, as the temples and arches of their erection which still remain to us are indisputable proofs, for even in their ruins they speak most eloquently for simple and pure construction. It is to be regretted that we moderns should be coming so slowly into the perception of this fact, although within the last decade we seem to be waking up to a realization of better things, and, as I said before, I feel that the country is largely indebted to this Association, and others of similar character, for the opportunity which has been afforded for greater familiarity with the artistic and beautiful. Well will it

be for us if, in the future, we can find something in every labor to elevate it, something to soften the hard lines of work into gracefulness and comfort; well will it be for us to realize that beauty is not inconsistent with usefulness, that nature, with all its grand capacities for work, is our greatest example, that

“ A thing of beauty is a joy forever.”

I come at last to the most important factor in the question under consideration — The Mechanic, the Man. His Possibilities and Power, his Position and Patriotism!

It has been usual to consider the field of influence and work of the mechanic as simply a subordinate one; he performing what he may perform merely as a step for the advancement of the higher branches of science and art; and the mechanic himself has fallen as readily and as often into this erroneous conclusion as any other part of the community, and alas! has been contented to remain there. It would be an unjust thing to say that while the world finds more and more at every step its dependence upon the brain and work of mechanics, that they are not equally dependent upon others for their opportunities and encouragement; the interests of all the various divisions of labor are so inextricably interwoven that it would be the height of folly to place boundaries to say how far the interest or province of one or another extends, still, I would remind each and all that the peculiar office and work of the mechanic might be likened to the steam power of an engine; while it is true that, without the engine, the steam would be simply an unweighed force, it is equally true that the engine would not only be useless, but really *unthought of*, without the motive power.

Human beings are dependent creatures, and in so far as we shut ourselves out from interchange of thought

and feeling with each other, thinking we can depend upon our own powers for satisfaction and life, just so far do we make pitiable failures, just so far do we hinder the world's progress and dwarf its thought. The mechanic *neglects his possibilities* when he allows himself to think that his is a limited sphere; if he feels that the moment the details of his particular work or method are mastered that *all* is done, and that his work in life is to go over and over the same routine, and nothing more, then indeed is his interest within narrow bounds, just as narrow as the clerk who does the same duty day in and day out, with no ambition for anything better, or as the lawyer or professional man of any kind who finds nothing *but work, in his work*. There is drudgery and irksomeness in every kind of labor, but I claim that there is for the mechanic quite as much, possibly more, of opportunity, than in any of the other branches of the world's work.

The unthinking forces of nature are lying all around him, ready at the touch of genius and skill to serve the thinking forces, and while it is quite necessary for him to understand the details of what has been done, he always has before him the incentive of doing something that has never been accomplished.

What helps and aids are peculiarly his. The first great tool he becomes acquainted with is the human hand. Look at it, workers and thinkers! What cunning mechanism fashioned with all the genius and ingenuity of centuries can compare for an instant with this wonderful instrument which accompanies us on our entrance into this world? Look at it, think of its grace, its adaptability, its power! Look at it, it has "five points of fellowship" with every hidden secret and every possibility of the world of matter. These are the "pickers and stealers," as Shakespeare called them, which have dragged, from the bosom of mother Earth, man's sustenance and wealth and power.

The symbol of this Association is the strong right hand. How appropriate, how suggestive is this original working tool made with just fingers and thumbs enough and no more! Naught can compare with it, naught can supply the place of this strong right hand, so gentle in its persuasiveness, so delicate in its touch, and yet with strength to hold the levers that can move the world!

Armed with this wondrous instrument, the mechanic is well equipped, and the dexterity of practice soon places him among the producers of the world. He takes the offerings of nature and fashions them into beautiful forms for use and adornment, he guides the powers of the elements to perform great tasks for humanity, and though "in the sweat of his brow must he eat his bread," he finds a blessing in the curse, and would not alter the decree.

Let any one of this audience stand beside a true mechanic at his work, watch the deftly driven tool, see the care and patience of his daily toil, the pride and satisfaction he takes in doing his work well, and I defy them to despise him, rather will they say with old George Herbert:

"A servant with this clause,
Makes drudgery divine,
Who sweeps a room as to God's laws,
Makes that and the action fine."

Follow an inventor through all the phases of his struggle, from the time when he is first wrestling with his idea, to his victory; persistence is his peculiar virtue; from day to day, from hour to hour, he restlessly pursues the thought that beckons him on; through toil and hardship, and poverty even, careless of any privation, if his idea can only be realized, and when, at last, his patient endeavor is crowned with success, we see as

pure delight beam in his eye as ever in the astronomer's, when he discovers a new star, and we see, besides, a truer and a larger man, for

“ Gaining manhood in the manly strife,
The fire that fills him smitten from a flint,
The strength that arms him, wrested from a fiend,
He stands at last a master of himself,
And, in that grace, a master of his kind.”

Work, to be true, must be done, not only with the hands, but with the brain and heart; done otherwise, it is not worth much, and neither elevates the work, nor the man. The demand for the skilled mechanic will never cease as long as the world lasts, and the possibilities are as various as the demands. Let him seek for *all* there is then in his life, and believe, that, while we may not all become great, that many might who do not, and that we can all be great enough to do well, whatever may be our work, and that is a distinction which means as much when applied to the humblest mechanic, as it does when applied to the highest in the land. Let him remember that his trade, if rightly viewed and used, is an *art*, and the more he tries to strengthen and perfect it, the more does he strengthen and perfect himself.

We may now, naturally, consider the Mechanic's

POSITION

in the society of the world.

It has been said, that “the progress of history is toward the point where birth shall not determine the destiny of the coming man.” I would supplement this by stating my belief to be, that the time must come, when intrinsic worth, coupled with intelligence, shall be our truest aristocracy. It is not strange, in the society of the world, that some should hold themselves aloof from

others, and find more congenialty in associations, for which their education and circumstances of birth, have fitted them. If we examine, calmly and fairly, the foundation of the old aristocracies, we will find that they are based upon just such conditions as we would consider honorable and to be desired. Long continued integrity for generations, so that the name of certain families become the synonym for honor, untarnished fame in public office, descending from father to son, and so on down a long line are some of the many honorable causes for the existence of blue-blood, which is considered so desirable by many. That such distinctions should be gradually fading away is at once to be deplored and to be desired. To be deplored, if the same high toned integrity and honor is still offered for the respect of society, and to be desired, if the descendants of the old purity should be far from pure, and only have the name and not the honor to recommend them.

Those engaged in mechanical pursuits are often inclined to think that people in other kinds of business feel above them. To such, I would say, do not fall into the error of believing that any class *is* above you, simply because it places itself there; do not, above all things, pay any respect to the "Aristocracy of Clothes." Carlyle, that greatest of English thinkers, has, long ago, shown the fallacies and follies of that. If you have the real gentleman in your bones, to use a homely but familiar phrase, it will show itself and be recognized, no matter what be the outward gear, be it the frock of the farmer, the blouse of the mechanic, or the broadcloth of the merchant, and if you have not got it, it would be dishonorable to try to make you believe so.

It may be a self-evident truth, as our forefathers thought, that "all men are created free and equal," but the further truth is just as self-evident that they do not

remain equal. This is true in all vocations ; the thrifty, skillful mechanic does not take as his bosom friend the shiftless, lazy and heedless workman ; neither does the honest, upright merchant care to associate with the deceitful and dishonest tradesman.

It is a fortunate plank in the structure of society which provides for divisions and classes ; otherwise good, bad, and indifferent, would be huddled together in a confusion that would bring neither comfort, pleasure or profit to any one. There is, however, particularly in this country, an element of assimilation which brings the best of all classes into harmony on common ground, and this element is what we all ought to encourage, all ought to hope for ; it is the Aristocracy of the Future.

It will be well for the mechanic to be determined not to stop at mediocrity, but to aim for the highest ; it will be well for him to feel the *value* of culture and refinement instead of despising them ; it will be well for him to notice what other branches of work and thought touch upon the circumference of his little sphere, and instead of being satisfied with the narrow details of his own particular work, to study and examine into everything that pertains to it.

It will be well for him to remember that though Labor may stoop to gather the treasures which prodigal nature has strown beneath her feet, "she stoops to conquer."

It will be well for him to remember that if he does not honor his calling, his calling will not honor him.

He who works with enthusiasm in his vocation, whatever it may be, finds beauty and grandeur in it, and finding these, is elevated and dignified into a fitness for better things, aye, for the very best. If you doubt this, I ask you to go with me to the inventor, the mechanic who has had a conception enter his brain, and has worked it to successful completion ; listen with me to his spirited

and earnest words, see how his eyes light up with honest pride and satisfaction, see how the man glows within him, mark how his whole desire is for the success of his idea, and not for the fortune that is to come from it; see, too, those who have gathered around him, men whose names are the most honored and esteemed in the scientific world, who bow with respect and admiration before this man who has wrested a great secret from the womb of the eternal.

Suppose that you do *not* succeed; it is certainly better to have had a continual impulse towards advancement, and have had the benefit of the inspiration, even if your lot is poor. And is poverty a peculiar and all powerful bar to greatness? Some of the most renowned men of the world have been its poorest, and their lives speak to us of the truth that filled the mind of Robert Burns, when he wrote :

“ Is there for honest poverty
 Wha' hangs his head, and a' that?
 The coward slave we pass him by;
 We dare be poor for a' that,
 For a' that, and a' that
 Our toils obscure and a' that;
 The rank is but the guinea's stamp, —
 The man 's the gowd for a' that.”

The mechanic has just as good a chance to shine in the *best* society of the world as any other man, and he may be sure that the man who never says that a thing cannot be done is the man to advance and become in time not only master of himself, but master of his fellows.

PATRIOTISM.

And last of all I would touch upon the mechanic's duty to his country. Of all the lands the sun shines

on, this land of ours we hold to be the best that lifts its face to heaven. And why? Because 't is free!

“From end to end, from cliff to lake, 't is free!
Free as our torrents are, that leap our rocks
And plough our valleys without asking leave,
Or as our peaks that wear their caps of snow
In very presence of the regal sun.”

No country presents such opportunities for the worker as America; no country protects its industries or offers the advantages that she does.

One of England's greatest statesmen, W. E. Gladstone, in a recent paper called “Kin beyond Sea,” thus gives the thought of the most intelligent minds of that country in regard to ours:

“There is no parallel, in all the records of the world, to the case of that prolific British mother, who has sent forth her innumerable children over all the earth to be the founders of half a dozen empires. She, with her progeny, may almost claim to constitute a kind of universal church in politics. But, among these children, there is one whose place in the world's eye, and in history, is superlative; it is the American Republic. She is the eldest born. She has, taking the capacity of her land into view, as well as its mere measurement, a natural base for the greatest continuous empire ever established by man. And it may be well here to mention, what has not always been sufficiently observed, that the distinction between continuous empire and empire severed and dispersed over sea, is vital. The development which the American Republic has affected has been unexampled in its rapidity and force. While others have doubled, or at most trebled, their population, she has risen, during one century of freedom, in round numbers, from two millions to forty-five. As to riches, it is reasonable to establish, from the decennial stages of

the progress thus far achieved, a series for the future ; and, reckoning upon this basis, I suppose that the very next census, in 1880, will exhibit her to the world, as, certainly, the wealthiest of all nations. The huge figure of £ 1,000,000,000, which may be taken roundly as the annual income of the United Kingdom, has been reached at a surprising rate ; a rate which may, perhaps, be best expressed by saying, that, if we had started forty or fifty years ago from zero, at the rate of our recent annual increment, we should now have reached our present position. But, while we have been advancing with this portentous rapidity, America is passing us by at a canter. Yet, even now, the work of searching the soil, and the bowels of the territory, and opening out her enterprise throughout its vast expanse, is in its infancy.

The England and the America of the present are probably the two strongest nations of the world. But there can be hardly a doubt, as between the America and the England of the future, that the daughter, at some no very distant time, will, whether fairer or less fair, be unquestionably yet stronger than the mother."

If, in the view of our greatest antagonists, we are so proudly started on a career of success, with the resources of a broad land stretching three thousand miles from the Atlantic to the Pacific, fertile and prolific beyond possibility of statement, how can we question, for an instant, the advantages to the worker, who, above all others, must come in contact with, and be a part of, the onward sweep of empire.

America offers the most of everything dear to the heart and hand of the mechanic ; she has the most and best of undeveloped country, the most and best of employment, and the most and best of liberty !

There have been times in her history when bad men

seeking for power have attempted to rob her of the very sinews of her integrity, and we are now in the midst of a struggle which is to prove the vitality of the principles which underlie all sound government, and that is our honesty and good faith. The attempt to place our monetary system upon a paper basis is a deliberate stroke at our prosperity and security as a nation, and is unparalleled in the history of the world.

I say unparalleled, for there has never before been a nation so amply able to meet all its obligations, in the way and manner it was obviously the intention to do, which sought to take advantage of its creditors simply because it would add to its own present accumulation by doing so.

If there was to be no hereafter, it perhaps might seem expedient to avoid paying our honest debts, but as we have, or hope we have, a large future before us, in which the same creditors are to be invited to trust us again, it would perhaps stand us in hand to be careful how we establish a reputation for double dealing.

A celebrated lecturer gave here in Boston a few evenings ago his idea of the cause and cure of our "hard times," which seemed completely to cover the ground. He said, "when we were running in debt, when everybody was willing to trust us, when we could get any amount of credit, then business was flourishing, and everybody was happy ; but just as soon as we find that we have got to pay our bills then the times are hard ! It is always easy enough to run into debt, and always hard to pay. Now when this country wanted money we may have had to make a pretty hard bargain, but I believe we are too great a nation to go back on our word, we can't afford to ; I believe that the only way for us to do is to live up to our bargain and pay what we agreed to ; and I believe that the only way out of our hard times is to *work* out."

It seems to me that the lecturer "hit the nail on the head," and I am confident that every intelligent mechanic must acknowledge that the principle stated is the only true one, the only one to follow if we hope, in the future, to be able to present ourselves unashamed in the markets of the world.

It is a principle that all good mechanics go upon in transacting their business, that a good day's work is worthy of a good day's pay, and I do not believe that they, of all men, have got to the point of giving a day's labor, a piece of their lives, in exchange for a piece of paper that in itself is next to nothing, and depends for its value upon a certain promise to pay, which means absolutely *nothing at all!*

Labor is a reality ; and the greenback, unbalanced by any real value, is nothing but a shadow.

The war cry raised by would-be governors, and other political demagogues, of the conflict between labor and capital, is too weak to deceive the practical and matter-of-fact business men of this Association ; they know perfectly well that there is no real struggle between the two. They are necessary to each other, and represent each other ; in one sense Capital is Labor, and Labor is Capital. Without accumulations of capital there would be no progress ; with capital, equally divided, there would be no incentive to work, and therefore stagnation. The whole argument is calculated to deceive ; but thanks to the votes of the *real* working men of Massachusetts, the Old Bay State still stands for honesty !

Let no man attempt to delude the mechanics of this country into a belief in the fallacies of fiat money and Labor Reform ; they know, too well, the *worth* of labor, to exchange it for a phantasy of the brain ; they know, too well, the *happiness* of labor to be *reformed* into the loafers and tramps of the politician's heaven.

As regards our ability, as a nation, to pay our debts,

let me quote once more from Gladstone. "We have talked big," he says, referring to England, "about the payment of our national debt; but, in sixty-three years, we have paid but £100,000,000, or scarcely more than £1,500,000, per year. But, in twelve years, America has reduced her debt £158,000,000, or at the rate of £13,000,000, for every year. In each twelve months she has done what we have done in eight years! Her self-command, self-denial, and wise forethought for the future, have been, to say the least, eight fold ours."

Shall we go back upon the record already made, or shall we stand true to our word, keeping our bonds as they are to-day, the most desirable of all the nations of the earth?

Such a question is almost an insult to the intelligence of this audience, to the honor of this Association, which I address.

This Society, from its very inception, has been formed of men whose patriotism, whose devotion to the honor of their country, has never been questioned. From the first president, whose midnight ride awoke the villagers of Middlesex to strike the first blow for liberty, down the long line of honored names that grace the roll, to those now present with us, all have been good men and true, ready at their country's call to place "their lives, their fortunes, and their sacred honor," upon her altar.

Not then to this Association do I address my last words, they need no adjurations; but to the mechanics at large whose powerful hands and sturdy hearts are the pride and bulwark of our land. Living in a country which has always been the protector of industry, and the hope of the worker, a country whose broad arms encircle a continent, holding within it riches greater, and opportunities larger, than any country on this planet, a country where you and your children have liberty and equality forever assured to you, I beseech you to be true to it and to yourselves.

Whenever in history the American Mechanic has been called upon to defend the right, whenever he has heard an appeal to succor the distressed, whenever he has been asked to shed his blood for his country, he has never faltered, but, in the front rank of charity and patriotism, he has been surely found.

So, in the future, I implore you all who represent these great interests to be loyal and charitable.

Charitable to all who suffer and struggle, and loyal to the best and truest interests of that country whose protecting wings shelter and enshrine your homes, whose broad principles elevate and dignify your calling. Let it be the grand struggle of your lives to keep the Union of States unbroken, to keep one flag waving over an undivided country, from sea to sea! And let your prayer be the inspired utterance of Longfellow.

“Thou, too, sail on, O Ship of State!
Sail on, O Union, strong and great!
Humanity with all its fears,
With all the hopes of future years,
Is hanging breathless on thy fate!
We know what Master laid thy keel,
What Workmen wrought thy ribs of steel,
Who made each mast, and sail, and rope,
What anvils rang, what hammers beat,
In what a forge and what a heat
Were shaped the anchors of thy hope!

Fear not each sudden sound and shock,
’Tis of the wave and not the rock;
’Tis but the flapping of a sail,
And not a rent made by the gale!
In spite of rock and tempest’s roar,
In spite of false lights on the shore,
Sail on, nor fear to breast the sea!
Our hearts, our hopes, are all with thee,
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o’er our fears,
Are all with thee — are all with thee!”

TWENTY-FOURTH

Triennial Festival.

The Twenty-fourth Triennial Festival.

THE Twenty-fourth Triennial Festival of the Massachusetts Charitable Mechanic Association was observed in the Exhibition Building on Park Square, Columbus Avenue and Pleasant Street, on Wednesday evening, November 13, 1878. Nearly three thousand persons were present, about half of whom were ladies. Invitations were sent to the principal contributors to the thirteenth exhibition, the judges, and others, and among the guests of the Association were many of the most prominent gentlemen of the city. Once again the great building was brilliantly illuminated and the throng poured through the gates, but how changed was the appearance of the vast interior! The whole of the main floor was occupied by tables, neatly spread and prettily ornamented. Six rows of tables stretched the whole length of the building parallel with Columbus Avenue, and tables placed at right angles with them occupied all the rest of the space. The entire front of the galleries was trimmed with bunting, and at the head of each post hung a portrait of an ex-president or other past official of the Association. The most prominent feature of the decoration was on the orchestra balcony, which projects from the Columbus-avenue gallery, and consisted of flags hung in graceful folds and caught up at the centres by shields and an eagle. In this balcony the Germania Band was stationed, and, at frequent intervals during the evening, furnished beautiful music.

The guests on arriving passed directly to the galleries, where extensive provision had been made for the checking of clothing. An efficient corps of ushers, under the chief-marshalship of ALEXANDER BOYD, Esq., directed the movements of the gathering throng. Many of the ladies, and not a few of the gentlemen, were in full evening dress. The officers of the Association and their more especial guests assembled in the room formerly occupied as the restaurant. There were, with ladies, more than two hundred. It was nearly seven-and-a-

half o'clock when the guests, headed by the President, started toward the platform, which was directly opposite the band balcony. After they had reached it and been seated, at a given signal all the stairways were opened, and the remainder of the company descended to the floor. With the assistance of the ushers, all obtained their places at the tables without confusion, and were quickly seated, all the chairs being turned toward the platform, and the vast assembly, with the attractive accessories, presented one of the finest sights ever seen in any American city.

The exercises opened at half-past seven o'clock, by an Overture from the Band, Carl Eichler, leader, followed by prayer from the Rev. EDWARD EVERETT HALE.

JOSEPH F. PAUL, Esq., the President, then rose and said they had assembled for a double purpose—first, to carry out one of the provisions of the Constitution of the Association by holding this, the Twenty-fourth Triennial Festival; and second, to pay tribute to those gentlemen who had been contributors to the exhibition, and also to the gentlemen who had given their time to the work of awarding the Medals. It was only his province to preside. Others were prepared to address them, and statistics, which was all that he had to give, would be dry and uninteresting. Without further remark, he presented the Orator of the evening, Mr. WILLIAM H. SAYWARD, one of the members of the Association. His address, herewith given, was well delivered, in passages eloquent, and, throughout, an interesting and scholarly production.

At the close of the Address, at 9 o'clock, the President invited the company to partake of the collation, prepared under the direction of Mrs. CHARLES A. VINTON, with the following

M E N U .

Cold Meats.

Roast Turkey, Cranberry Sauce.

Sugar-Cured Ham.

Pressed Tongue.

Escalloped Oysters.

Chicken Salad.

Lobster Salad.

Ice Creams.

Frozen Pudding.

Parker House Rolls.

Coffee and Tea.

Cake and Fruit.

Flowers.

The Ices, etc., were from the establishment of JAMES DOOLING. The Floral Decorations furnished by GALVIN BROTHERS. The Lady Waiters kindly volunteered their services in compliment to Mrs. Vinton. The tables were well waited upon by the one hundred and twenty-five young ladies, and by seventy-five colored waiters furnished by Mr. Dooling. Three thousand plates were laid. Every one said it was an eminently successful entertainment.

After a reasonable time at the feast, President PAUL again called the company to order, and said it was usual, on these occasions, to bestow the labor of acting as toast-master upon the Vice-President, the chief executive officer for all exhibitions and festive occasions. Following the precedents, he would now introduce to their favor Mr. CHARLES W. SLACK, the Vice-President of the Association.

Mr. SLACK responded to the announcement by saying that he had had but little to do as executive officer, because of the entire harmony in the Board of Management, to whose ability, composed as it was of men of large experience in such matters, and accustomed to deal with complicated details, the success of the late Fair was largely due. He mentioned also in terms of warm praise the services of the Superintendent, Mr. John Thompson, the Chief Entry Clerk, Mr. George B. Hanover, and of the Art Committee. He spoke of the remarkable success of the Exhibition, and also of the unseen, but not less important, results in the form of encouragement, information and inspiration that had gone forth from it. After stating that fifty-six gold medals had been awarded this year against forty-two, two hundred and forty silver medals against two hundred and seven, and two hundred and eighty-four bronze medals against two hundred and thirty-one four years ago, he read some of the more important awards, referring his audience to the daily papers for the full list. In closing, he spoke of the favor of the Legislature in passing the Act which made the erection of the building on the site they occupied possible, and to its signing by Governor ALEXANDER H. RICE, whom, after paying him an eloquent tribute, he introduced, amid prolonged applause.

Governor RICE said his words would be words of congratulation to the Association, upon the brilliant and triumphant

success of its notable exhibition—an exhibition so vast in extent, so remarkable in variety. No one could stand in such a presence without feeling an interest and sympathy in all the activities of life, because no one could fail to remember, that the Arts were at once the measure and the instruments of all civilization. Before the birth of the Arts men lived in primitive simplicity, and the measure of civilization throughout the world was the artistic memorials which the nations of the world had left behind them. The industrial arts were those by which the prosperity of all nations had been gained, by which all people have been lifted up, human intercourse facilitated, and men more and more and more brought into the relations of one great family and one great brotherhood. We no longer depended upon the facilities of nature; the arts had subordinated it. But the mechanical contrivances composed only one department of the arts. There was attached to the material department of the exhibition a department of the fine arts, and also the department of the liberal arts, poetry and music. The utilitarian arts and the fine arts all contributed to the development of the higher intellectual processes, which developed and elevated and dignified human character. Thus they were all united, and there was constant reciprocity between what was material and what was æsthetic and ornamental. Human nature stood, as it were, in a plain between the brute creation on the one hand, and the angelic on the other. It had already passed the line where the brutal power was dragging humanity down, and got into that higher and nobler sphere where the angelic influences were drawing it upward; and every thing that was beautiful was angelic in its nature, and our hearts leaped and our minds stretched out after that which was purer and more and more elevating, calculated to lift us up higher and make us grander and nobler than we had ever been. It was a great privilege to live in this age; and he thanked the noble Association, and everybody who had contributed to the exhibition, for the demonstration it had made in the line of all this upward and progressive tendency of human nature. It was a fitting thing that, in this noble old Commonwealth, which had done so much for American civilization in the past, which vindicated herself always when she was brought directly upon issues involving her reputation or her character [applause],

there should have been such an exhibition emblematic of its industry and of the character and of the enterprise of her people. [Warm applause.]

The Vice-President next introduced Hon. JOHN D. LONG, Speaker of the House of Representatives, and Lieutenant-Governor elect, to speak for the popular legislative assembly. He was warmly received with applause, and responded briefly. He said he regretted the absence of the new Governor, (Hon. Thomas Talbot,) whose eloquent life, himself being a mechanic, would commend him to the Association. He spoke of the passage of the bill by the Legislature in reference to the exhibition building, and extended the congratulations of that body on the success of the exhibition.

Hon. ALANSON W. BEARD, Collector of the port of Boston, was presented as an honorable business man, and an upright public servant. He said that, in the fact that every master mechanic whom he saw before him once worked for wages, was a proof that in this country there were no classes, and that everybody could succeed by honest endeavor; and how wicked, remembering that, was the man who would attempt to create antagonism between the employed and the employers. [Applause.] There was one thing worthy of notice, that these agitators who come before the public, claiming to be mechanics, were considered, among their fellows, very poor artisans. [Laughter and applause.] Mr. Beard commented upon the fact that one-third of the exports within the last few years had been mechanical and manufactured products; and, in closing, improved the opportunity to speak a few sterling words in favor of honest money.

Hon. RICHARD FROTHINGHAM was introduced to speak for the city of Boston, as the able editor, the accepted historian, and the splendid man. He responded with a few happy words upon the fostering aid Boston ever gave all worthy enterprises, notably those of its intelligent and public-spirited mechanics.

Rev. EDWARD EVERETT HALE was next called upon to say a word or two for the clergy. He said that the magnificent spectacle before him, and the exhibition that had just closed, were all one thing — the training of men, and the elevating of them in their lives and work, that their work might be grander

and nobler. It was the business of the Association, and of education, and of the Christian church, to raise men from the drudgery of labor to the dignity of work. Sailors at sea spoke sadly when they said their vessel labored, but with delight when they said she worked well. So mechanics and artisans should be taught the dignity of work, and be inspired with the desire to become skilled, and, therefore, successful workmen.

Mr. HENRY D. WILLIAMS was presented as the gentleman who, as chairman of the fine arts committee, had done so much to make eminently successful that important feature of the late exhibition—pronounced by competent critics the finest exposition of paintings ever seen in New England, and possibly excelled but once or twice in the whole country. He was received with generous demonstrations of regard, and spoke as follows:—

MR. PRESIDENT AND GENTLEMEN OF THE ASSOCIATION:—Your call is welcome, as it gives me public opportunity, in behalf of the committee, to thank the management of the recent exhibition for the kind courtesy and generous confidence extended toward us, and the liberal expenditure incurred for the sections in our charge. The art department was successful, first of all, from the liberality and fostering care of the Association; second, from the public spirit of the artists of Boston, New York, and Philadelphia; and third, from the generous favor of citizens who opened their houses, permitting selections from their collections of works of rare interest and value. The committee were but the organizing and directing force—collecting, arranging and protecting what others placed in their care. If the service thus required was performed so as to meet your approval, we are content.

Five months since you called upon us, and from the time of appointment till the present, when you accept our final report, the exhibition has been our daily charge. At the outset, we were met with the question, What has the Mechanics' Association to do with Art? A generation ago, and it might have been difficult to have given an answer. But to-day, you can safely assert, not only its right, but its duty, to foster Art. We have all come to know that the mechanical and the fine arts must make common cause in giving comfort, convenience and elevation to man. A new country has first to provide necessary comforts, but later on it has a right to consult taste, and to seek refinement, as well as shelter and food. So, Mr. President, in these later days Art comes more to the foreground,

and the Association but yields to the demands of the times when it honors Art and makes room for its professors.

What a change has this generation seen in the position of Art in the public esteem? Its spirit has had influence in almost every field. It has sought out our founderies, and given grace and symmetry to our machines and tools. It has entered our workshops, and remodeled the forms of furniture for our homes. It has invaded our mills, and inspired new fabrics for floors and walls, for decoration and dress. It has seized our stores and shops, enlarging our range of choice in satisfying our tastes. It has entered our schools, and grafted on our educational system methods of æsthetic culture. When the fire swept our city, laying large sections in ashes, it aided the mechanic, substituting architectural variety for dull monotony, and giving us a new Boston, rich in beauty and picturesque in effect. It summons William Hunt to Albany, that Art may decorate worthily the magnificent capitol of the Empire State. It calls John Lafarge and his artist friends to Trinity, and sends many another from the easel to the walls of church or home. Because the public taste has been improved by a larger acquaintance with fine pictures, with graceful statues, with works of beauty in porcelain and metal, every exhibit made in this building, from the simple hinge on the door to the magnificent engine which for two months moved with such majestic regularity, was more comely in form and better fitted for its special work. The best answer, then, to all doubting questions is the—*exhibition itself*. (Applause.)

Gentlemen of the Association, by your generous Art display you conferred on the community a lasting benefit. You aided and encouraged artists by giving dignity and prominence to their works, and by affording them opportunity to study and compare different schools. You benefited mechanics by placing before them works of beauty, and showing them that genius solving its problem on canvas or in marble is as grand and noble as when it creates a new fabric or invents a new machine. Permit me once more, in behalf of the committee, in behalf of the exhibiting artists, and of the great public which crowded each day the Art annex, to offer you most hearty thanks. (Prolonged applause.)

Other addresses were made by JOHN W. CANDLER, Esq., representing the Commercial community and the Boston Board of Trade; Hon. MARSHALL P. WILDER, Agriculture and the Historic-Genecalogical Society; Rev. Dr. JOHN L. DUDLEY, the Granite ledges of New Hampshire and the fertile acres of the Great West; and HENRY P. KIDDER, Esq., the monetary interests of the community—all of whom were listened to

with unwearied interest by a large auditory, intent on getting the last word of the festive occasion.

At 11 o'clock, after a few earnest and congratulatory words, the Vice-President, anticipating greater triumphs for the Association in the future, dismissed the assembly for the last feature of the evening's enjoyment, a promenade concert and dancing, the music by the Germania Band, which — during the evening, executed the following programme : —

- | | | |
|---------------------------------|-----------|-------------------|
| 1. March, | | <i>Gung'l.</i> |
| 2. Overture — "Zampa," | | <i>Herold.</i> |
| 3. Potpourri — "Faust," | | <i>Gounod.</i> |
| 4. Waltz — "Manola," | | <i>Lander.</i> |
| 5. Selection from "Tannhauser," | | <i>Wagner.</i> |
| 6. Polka Redowa — "Rosette," | | <i>Strauss.</i> |
| 7. Overture — "Fra Diavolo," | | <i>Auber.</i> |
| 8. Selection from "Adelie," | | <i>Donizetti.</i> |

Polkas, Waltzes, Mazourkas, etc., for dancing, without limit.

At 12.30 the assembly wearied of dancing, and, with the music, gradually withdrew, closing one of the most delightful triennial festivals in which the members ever indulged.

The credit of this success belongs to the efficient Committee on the Festival — Messrs. John Mack, Everett Torrey, Charles W. Slack, George W. Pope, Henry L. Leach, and Joseph F. Paul.

16
Industrial Exhibitions: Their True Function in
Connection with Industrial Education.

AN ADDRESS

DELIVERED BEFORE THE

THE NEW YORK
PUBLIC LIBRARY
P 27274
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1898.

Massachusetts Charitable Mechanic Association,

AT ITS

TWENTY-FIFTH TRIENNIAL FESTIVAL,

IN THE

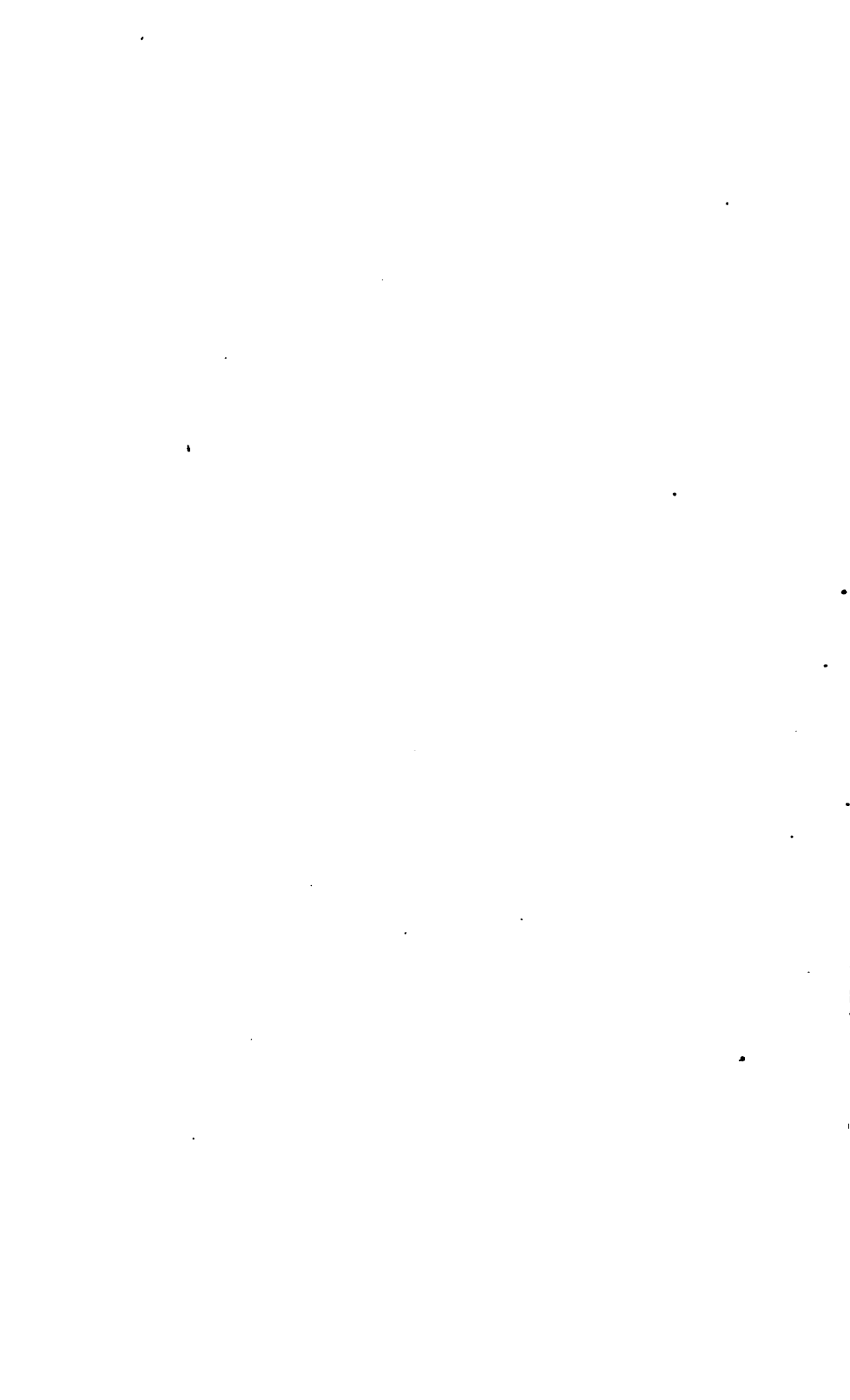
MECHANICS' BUILDING, HUNTINGTON AVENUE, BOSTON,

NOVEMBER 22, 1881.

By EDWARD ATKINSON.

★ MASS. HIST. SOC.

BOSTON:
WRIGHT & POTTER PRINTING CO.,
18 POST OFFICE SQUARE.
1882.



**Industrial Exhibitions: Their True Function in
Connection with Industrial Education.**

AN ADDRESS

DELIVERED BEFORE THE

Massachusetts Charitable Mechanic Association,

AT ITS

' TWENTY-FIFTH TRIENNIAL FESTIVAL,

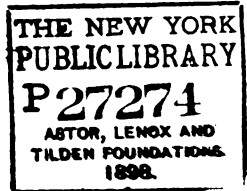
IN THE

MECHANICS' BUILDING, HUNTINGTON AVENUE, BOSTON,

NOVEMBER 22, 1881.

By EDWARD ATKINSON.

**BOSTON :
WRIGHT & POTTER PRINTING CO.,
18 POST OFFICE SQUARE.
1882.**



INVITATION AND ACCEPTANCE.

SPECIAL ASSOCIATION MEETING, }
BOSTON, Dec. 21, 1881. }

On motion of ANDREW M. MCPHAIL, it was unanimously

Voted, That the thanks of the Association be presented to Edward Atkinson, Esq., for his interesting and instructive address on the occasion of the celebration of the Twenty-Fifth Triennial Festival of the Association, November 22 last, and that he be invited to furnish a copy of the same for the press.

BOSTON, Dec. 23, 1881.

JOSEPH L. BATES, Esq., *Secretary*:—

DEAR SIR:—I have received your note of the 23d, with the pleasant information regarding the vote passed by the Association. I enclose a copy of my address for publication.

Sincerely yours,

EDW'D ATKINSON.

ADDRESS.

MR. PRESIDENT, LADIES AND GENTLEMEN : —

It is a great honor and pleasure to me to have been chosen to speak to you this evening. The rule of our Association is, I believe, that whoever gives the triennial address must be a member. Now membership in this Association implies that the person must be either a mechanic or an object of charity; I am not a mechanic according to the customary use of that word, and I hope I am not yet an object of charity. How then shall I justify you in having admitted me? My life has been identified with the spinning and weaving of cotton cloth; that would constitute me in common speech a *manufacturer*, and would relegate me to the company at the other end of the avenue; but much as I honor the living and the dead to whom that great enterprise owes its existence I yet prefer your company.

“ The Lord do so to me, and more also,
If aught but death part you and me.”
And by you will I be buried.

But where, then, is your justification? If I am neither mechanic nor, as yet, an object of charity, what business have I to be a member of this Association? I will assert and prove my rights.

I am the Association. Unless you can find another man in your number like myself — who never did anything with his own hands in his life, except to drive a pen — who can neither make a joint nor lay a brick, neither forge nor weld, neither stitch a seam nor set a type — then I only am the Association, and all the rest of you have no business here. Why? Because you are nothing but *manufacturers*, and I am the only *mechanic* in the hall. You can *facture*, or make something with the *manus*, or hand, I can only set mechanism in operation, and by means of machinery work out results in which I have no practical share myself.

I can only work under the rule which underlies much of our modern work: "Never to do anything myself which I can get any one else to do for me." You, on the other hand, can exercise your own choice; if work for the head fails to be found you can apply your own hands, and you are then safe from want.

Of how many of our boys and girls can this be said? Is it not time to ask this question: How many of your own children can do the work which you have done so well?

What does it mean to do something with the hand and do it well? It means that brain, hand and eye have all been well trained together; it means that the whole man has been developed and not one part of him only; such a man can take a wholesome pride in his work, it is part of himself; no mechanism can ever rival the true work of the human hand, or give the full satisfaction of work well done.

Then to you, the real hand-workers — the crafts-

men — the true *manufacturers*, be the honors, if honor there is in a name, and let us who can only set mechanism in motion — who can do only mere machine work — take the lower places and defer to you. Only thus, gentlemen, can I justify my membership of this Association as a *mechanic*, and humbly ask you, my superiors, the true *manufacturers*, to listen to a few thoughts which seem to me well fitted to this occasion.

The real truth is we are all mechanics and we are all manufacturers — the words have lost their original meaning and now signify only two phases of the same work ; — they ought not to be parted, and I trust they never will be again in Boston, even by the length of Huntington Avenue.

My field of thought is very limited, and I must appeal again to the only art of which I know even a little, though I have worn the thread bare on other occasions. The finest work ever done, or that can now be done in the world in the fabrication of cotton cloth is still performed by the hand in India in the making of the Dacca muslins which have been named "Woven Wind." It is an hereditary art, and is still conducted as it may have been before iron had been smelted and before any tool of modern kind had become known among men. The cotton plucked with the finger is cleaned and separated from the seed by the snapping of a bow made of bamboo and strung with the gut of an animal ; it is carded with a fish bone ; twisted by the use of a stone distaff and the human finger — the ends of the warp are fastened in a simple loom made of reeds, while the weaver, seated

upon the margin of a hole dug in the ground, works only during the damp hours of the morning and of the evening. That is the true picture of a real textile manufacturer. All our modern textile machinery is but an evolution from, or modification of these pre-historic types.

On not one of our seemingly perfect modern machines can the work be equalled of those who have inherited this art and whose lissome fingers bear evidence of many centuries of training.

And as it is in this, so is it in many other branches of the finest work — the most perfect silk weaving is done upon a hand loom of simplest construction — but hand work is now a luxury where it is not a necessity.

The true benefit of modern mechanism consists in the quantity of useful work which it enables the workman to perform of sufficiently good quality to meet the increasing wants of a more and more dense population. Were it not for the rapid conversion of the products of the soil and of the mine, and the abundance which has ensued from the application of modern machinery to the arts, the abhorrent dogma of Malthus would ere this have been proved true, and even what are called civilized nations would have been swept away, not only by war, but by famine and pestilence, caused by scarcity.

Turn your attention for a moment to modern Italy. The great power of Rome was based not only or mainly upon force or skill in the arts of war. Agriculture was developed in marked degree; underdrain-
ing was practised; the modern reaper finds its arche-

type among the implements of the Roman Republic; the *silo* and the practice of *ensilage*, of which we now hear so much, and which may change all the conditions of New England agriculture, are fully described by Tacitus; the great aqueducts and means of irrigation and drainage, which are so marvellous in their very ruin, saved great areas from the pestilence which now scathes them; stock breeding was well understood, and the turnip culture, which has worked such vast benefit in Great Britain, was practised in Gaul and Brittany in the time of the Cæsars.*

But slavery sapped the foundation of this great industrial system—labor became ignoble—the mechanic was not honored—even the free barbarians of the Teutonic race who overwhelmed the great empire, themselves succumbed to the enervating luxury of slavery and war, until now modern Italy, so long held in the bonds of ignorance and superstition, presents the only example of a country called civilized, in which whole districts are devastated by a loathsome disease known as the *pellagra*, which is caused mainly by the want of sufficient and wholesome food.

It will have a strange sound to you when I speak of districts within our own country in which conditions analogous to these, although not as bad, may even now be studied by any one who is interested in economic science.

I will not speak of those strange and almost hopeless people, the clay-eaters and snuff-dippers of the

* See article on the "Agriculture of the Romans," by Prof. McBryde, of the University of Tennessee, in the Journal of the American Agricultural Association.

lowlands of some of the Southern States, but take you at once to one of the most beautiful and salubrious sections of our country, among mountains, of which Dr. Asa Gray says that one — Roan Mountain, in North Carolina — is the most beautiful mountain on this continent.

Within a radius of 150 miles from Mount Mitchell, a still higher mountain in this section, that is to say, within a circle of a diameter of 300 miles, rise the streams which are the sources of rivers flowing north into the Ohio, west into the Mississippi, south into the Gulf of Mexico, and east into the Atlantic ocean. I now quote from Colonel Killebrew, of Tennessee, who is in charge of the magnificent collection of timber, minerals and products of agriculture from this section in the Atlanta Exposition: "We have within this circle every mineral that animates industry; every kind of timber needed in the arts; 160 varieties are in this collection, six families or groups of iron ore, every kind of coal, winters never so cold as to interfere with out-door work, summers never so warm as to interfere with industry, great plateaus on which no case of consumption ever originated, valleys in which a light shower falls almost every day and in which the growth of grass is three-fold that of the famous blue grass section of Kentucky. What we need are moderate capital and skilled mechanics; the latter even more than the former, because they will speedily convert our vast resources into abundant capital; but bear in mind, Mr. Atkinson," said Colonel Killebrew, "when you carry this word to the North, tell them

there are two classes of people whom we will never tolerate in our land." "What classes are those?" said I, in some trepidation. The answer came as promptly and as sharply as the crack of a rifle, "*Mormons and Secessionists.*"

I can only give you one example of the industrial condition of the great district whose area stretches far beyond the 300 miles diameter described by Colonel Killebrew.

There are still within the great mountain section of our own land—within less than two days' journey from this very spot—from one to three hundred thousand people of our own blood and lineage, who are chiefly clothed in homespun fabrics. Bear in mind in this connection that by far the largest portion of the population of the whole globe is still scantily clothed in hand-made fabrics of cotton or of wool. Keep also in view the fact that in occupations to which modern machinery is applied, the lowest cost of production is compassed by those who earn the highest wages, because the measure of their earnings is in precise ratio to their skill and industry. Keep this principle and these facts in mind and you will then have a dim perception of the opportunity which commerce has yet to offer to the mechanic and the manufacturer of New England, provided the world can yield us hand-made or natural products which we will buy, and take in exchange the products of our machinery. Thus we may get ten or a hundred days' labor in exchange for one to five days of our own work.

Why has it happened that even a small part of our

own people are dependent on hand-work? Is the land where they live sterile? Is the climate bad? Are the conditions of life adverse to progress? Can they not make everything that we want? The very reverse, as I have told you, is true. There is no richer land on this continent than that of some of these interior mountain valleys. There is no better climate than that of some of these high plateaus. There is nowhere else in all our broad land such potentiality in mineral, timber and products of the soil combined in one place, or so much power to produce.

What, then, has retarded the progress of this people? Slavery only. It never indeed penetrated the mountain land in any great measure, but it surrounded this great "Land of the Sky," as it has been so well named, and kept its people from commerce with the world.

It is a strange sight, which may never again be seen in this country, but which is now present. In the grand central building of the Atlanta Exhibition, within the same rail which encloses the beautiful machinery of the Willimantic Linen Company, alongside a modern ring spinning frame working upon No. 100 yarn, are two spinning wheels and a hand loom of prehistoric type, yet operated now by women who have been trained to the work from early childhood.

Let me here interpolate an account of a little incident which brings into bold relief the capacity of modern mechanism. You have all heard of the two suits of clothes made in a day for two of the Governors. The full dress suit which I now wear was made in less than twelve hours from cotton standing in the field in the

early morning. The cotton gathered thus early was passed through a cotton gin before 8 o'clock, it was then carried through the cards and spinning frames of the Willimantic Linen Company, woven under the supervision of their representative upon a Crompton loom, dyed in the works of Mr. Thomas upon the grounds, cut by the skilful hands of Mr. Gosse, of Atlanta, and made up on the sewing machines of the Wheeler & Wilson Company, which latter machines also gave to the visitors in the exhibition another example of the best New England skill. The suit was sent to me at 6½ P.M. at Mr. Kimball's house, and arrayed in it, I made a call on Colonel Barrows, of the Willimantic Company at the neighboring house, by whom the suit was presented to me. The suit is lined with the silk made by the Cheney Brothers.

I have spoken of the Director General, my excellent host during my stay in Atlanta. The record of the exhibition is identified with his name; it was a little matter to state its need and give the reasons for it, and it would have sufficed but little to instruct a draughtsman how to make the plans, but even the zeal and good will of the progressive citizens of Atlanta would have failed had not the execution of the plans been in the charge of a man of such indomitable energy and executive power as H. I. Kimball, and to him is due the full meed of credit for what has been done.

Our friends in the South are ambitious to undertake the spinning and weaving of cotton fabrics, but I have urged them to be cautious—they have a hundred opportunities in which we cannot share—for the more profit-

able use of capital and labor. It startled them when I told them on what a small fraction the profit or loss of this branch of industry depended, and said to them they must first learn the difference between a nickel and a cent, and when I further added that we had in Massachusetts about seventy-five million dollars of capital in our cotton manufacturing, something over one hundred million in our railroads, but that the deposits in our savings banks were two hundred and twenty-five million, I fear they hardly believed me. But I added that the latter sum, belonging mostly to our working people, was just the measure of the difference between a cent and a nickel, and I have reason to believe that the outcome of the last remark will be the establishment of a Penny Savings Bank under the supervision of Mr. Sidney Root, a thoroughly competent and able man, who is the best friend of both the colored and the white laborers, and the chief promoter of the Abyssinian Library for colored men, for which he will be most glad to receive contributions of books.

But let us return to the main subject. These women who work upon the homespun fabrics may have come from one of the interior counties of that beautiful Southern mountain land where many of the inhabitants have never yet seen a wheeled vehicle—where English customs of the seventeenth century still survive, and where even the speech of the people marks their isolation. When I referred to one of her companions as *Mrs.* Hoffman, the gentle young woman who was so gracefully operating one of the spinning wheels corrected me, saying, "*Mistress* Hoffman, if you please!"

I obtained from the young woman data which I had long sought, by which I might measure the saving of human labor which has ensued from the application of the invention and skill of Arkwright and Cunningham, who made the modern cotton mill possible only a century since, and of their successors down to Mason, Knowles and Crompton, living representatives of the great mechanics of our own time and our own country.

In this homespun work two carders, two spinners and one weaver, working continuously and arduously for ten hours per day, can make eight yards of coarse cotton fabrics. In the factory one spinner and two weavers, with one hand on preparation and carding, can make more than eight hundred yards—more than one hundred fold.

It seems almost magical to see one of these women carding cotton on hand cards and bringing out the rolls ready for the spinners even while you are wondering what she is about to do ; yet less than a century since, when President Washington visited the Town of Boston, he found one ninth part of its population, 2,000 out of 18,000 in number, engaged in making hand cards for the use of our own grandmothers, whose homespun fabrics then constituted the main portion of the material for clothing New England. It is a singular fact that in a seven days' journey nearly every mechanic in this hall can study the progress of a century or more in the history of his own art. The way-side charcoal iron furnace, the primitive methods of making pottery, the little still which yields altogether too much moonshine whiskey, the house built of hewn

logs, and every article of furniture, including the loom and the spinning wheel, all worked out by hand ; all the arduous conditions of our own State of more than a century ago are there now ; but fortunately for those who dwell there, and for us also, the school-house has come with liberty, and the railroad so penetrating everywhere—not only among the mountains but upon the plains. This whole Southern land is now being torn in pieces and reconstructed morally and industrially, in such a way that we may regard the political froth which obscures the deep undercurrent, as a mere scum which the wholesome fermentation is discharging from the stream in order that it may be carried down into the great gulf to be heard of no more.

What then are the functions of the exhibitions like our own ; like the late exhibition of the Manufacturers and Mechanics' Institute, and like the yet more important one, in view of circumstances and conditions surrounding it, which is now in progress at Atlanta, Georgia? In the treatment of this subject I shall be very frank and shall submit my views in order to stimulate a wholesome discussion of the matter—they are my own, and are submitted without consultation with any one.

Exhibitions are useful in the precise ratio in which they serve the purpose of object lessons in industrial training. So far as they serve the purpose of merely advertising the products which represent the accomplished results of past inventions, they may be expedient and profitable, but they are of little significance for any other purpose. The mere money receipts from

visitors are the poorest measure of success, except so far as they affect the interest of their promoters.

The great exhibition at Atlanta would have been an immense success even if the first fear of lack of adequate receipts from visitors had not been surmounted.

The contrast between that exhibition and the two just ended here is very marked. The merchants and tradesmen of Atlanta have made almost no use of it to advertise their wares—it is almost absolutely free from trash, and it is also almost entirely American in the character of its exhibits. The examples of science and of machinery already applied to the useful arts are less in number than they were here, but to the majority of the people who see them they are of the greatest novelty and of the utmost interest.

On the other hand, the exhibit of crude and unused forces, now waiting for the application of science and art, exceeds anything ever seen before in this country, with the possible exception of the Centennial; and so far as the South is concerned, immeasurably exceeding that.

Everything has a point, and will lead not only to the extended use of tools, implements and processes already invented, but to the invention or completion of inventions not yet introduced at all. Time will not suffice, and this is not the place, for me to describe the absolute revolution in the cultivation and treatment of cotton which is sure to come from this beginning; neither can I here give the facts about the crops of the small farmers, who will soon become the controlling factors in Southern agriculture. What we have now

to consider is the true function of industrial exhibitions; and here I beg to say that I think the day of "World's Fairs" has nearly if not wholly gone by. They have been useful in their day, and have doubtless given a great stimulus to industry and art, but they now seem to me the most cumbrous, costly and confusing methods of accomplishing results which could be devised.

Let me not, however, undervalue such exhibitions. It is doubtless very useful to set great masses of people in motion, to get them out of their ruts, and to bring the citizens of different States and Territories together. One of the very greatest benefits of the Atlanta Exposition will be found in such an influence, and from the reduction in the excessive rates of passenger traffic, which has heretofore been the rule on Southern railroads, to a uniform excursion rate of one cent a mile. The lesson of larger profit from the lower rate may perhaps be learned, and the isolation and inertia of the Southern agriculturist may be broken up.

It may also be a great immediate benefit to a city to carry out one of the purposes which I understand to have been among the lesser aims of the promoters of the Manufacturers and Mechanics' Institute, to wit: To constitute the exhibition a great fair for the sale of goods, and thus to regain and retain branches of traffic which ought to be kept in Boston.

Great fairs, either under the name of World's Fairs, or under less ambitious titles may serve these purposes, but my purpose is to treat of exhibitions as means of education — as object lessons in industrial science.

Such were the grand and final purposes of our lamented friend, the late E. R. Mudge, and if we may venture to refer in any way to the motives of his chief associate, and may judge of them by the liberality and discretion with which he has sustained other institutions for industrial and technical education, such may still be the purpose of one whom we all honor but may perhaps not name aloud, although his name is in our minds. Such also I believe to be the purpose of every man in this old association.

What, then, should be our future course in respect to the use of our building and our future triennial exhibition? We have reason to congratulate ourselves upon our commercial success. No one, I suppose, now questions the wisdom of the purchase of this lot of land or of the construction of this building. Some of us may regret that there had not been even greater faith, and that the solid construction which marks a part of our work had not been carried out in the upper sections and in the roof, even though it had cost more. We all rejoice in the ample receipts by which our treasury has been replenished, and our means of accomplishing the charitable purposes of the association have been furnished. But we must not rest contented: if we do, our friends at the other end of the avenue may yet be justified, if they have ever intimated that our objects were not as broad and as beneficent as their own.

Let us then emulate and not compete; let us bring about that hearty co-operation by which the two structures may both be put to their best use, and may be

proved to be none too large for the useful work which may be done in them.

Most of us are, I believe, what are called "self-made men," although I never use that term without recalling the funny outburst of my late friend, Dr. Francis Lieber, when I used it in his presence. "*Self-made men, indeed!*" said he; "why don't you tell me of a *self-laid egg*?"

What we mean is that many of us never went to a good school in our lives, and never had the advantage of either technical or college education. Our instruction has been only that of the bench, the shop or the counting room. A course of instruction which is very apt to make men dogmatic and obstinate — what little they have learned by the somewhat painful method of experience they know so well and are so sure of that they undervalue all other instruction without the least consciousness of their own limitations. On the other hand, the graduates of our schools and colleges are apt to be so well booked in the theory of science and of the arts as to be entirely unaware of the necessity of practice and of experience, so that when they come to face the actual problems of real work, they are about as helpless as if they had never been instructed at all.

The two classes remind me of John Smith and Jim Brown, who ascended Mt. Washington together before the railway was built. John went on horseback and Jim went afoot. The next day they recorded their experience among the verses in Crawford's album as follows: "John couldn't sit down any better than Jim

could stand up." That is about the way of it when practice and theory are separated.

May we not then consider some of the objects which our Association may promote, either by itself or in co-operation with our friends?

First. There is no charity so beneficent as that which is extended to those who can help themselves, if the opportunity is only offered them.

How many men we have all of us known whose brains were so filled with inventive and constructive ideas that they could find no time to earn their own living; they are the theorists, except for whose work we practical men would be deprived of more than half our power of work.

How many men have we all known whose inventions have been kept back because they themselves had no control over the mechanical appliances needed to perfect them, and who have at last been forced to sell their brains for a single mess of pottage to some acute business man who makes a great fortune out of their ideas, while they remain as poor as ever.

I therefore suggest that one department of our light and useful basement be set aside as the "Inventors' Laboratory;" that it be furnished with adequate tools, appliances and power, and be kept for the use of all persons who may be approved by a permanent committee of our association; in which laboratory they may perfect or improve their inventions, and may be enabled to avail themselves of all the appliances and practical advice necessary for their work.

Second. Nothing is more needed at present than

an "Industrial Museum." We feel the constant need in the work of the Institute of Technology. We need technical collections of building materials—of textile fabrics, of chemical products, of ores and of timber. I could to-day obtain for the asking duplicates of every specimen in that superb collection of ores, timber and products of agriculture on exhibition at Atlanta, if we had a place to put them. The railroad corporations interested in developing their respective sections would jump at the chance to place the duplicate collection here. The Commissioner of Agriculture has already claimed the originals for removal to Washington.

Third. We have, in part by the aid of this Association, established a School of Practical Instruction in the Mechanic Arts, in connection with the Institute of Technology, it is insufficient in space and in appliances. If it could be transferred to one of these two buildings and in some way incorporated with the system of instruction of the Boston High and Latin School, it would serve as the normal school in mechanics which is becoming an absolute necessity, if we are to keep the lead in competition with other sections of our country more richly endowed with resources than we are.

None of these purposes would interfere with the rent or use of our hall or of other portions of our building. Our Lowell School of Industrial Design at the institute is crowded into narrow quarters far away in the attic of our building. Cannot this Association spare us one of those beautiful picture galleries for the free school of industrial design, which cannot now graduate its pupils fast enough to meet the demand.

Must we continue to send our sons to Europe in order that we may find a weaving school in which they can master the art of the loom?

Fourth. There is nothing inconsistent with our objects and aims in the purpose of the Manufacturers and Mechanics' Institute to hold a great annual fair for the exhibition and sale of goods in their building; rather let us co-operate with them, and during the period of their fair aid them in attracting customers and help our own finances by a continuous musical festival in our hall, and perhaps by an exhibition and sale of all kinds of works of art in our galleries.

Fifth. Let us invite them to coöperate in our triennial exhibition. Both of our exhibitions of this year were imperfect and unsystematic. It is not necessary to discuss the reasons — the faults were, under all the circumstances, unavoidable, but this ought not to happen again.

I venture to suggest that the committee on the next triennial exhibition should be appointed at once, with instructions to invite the appointment of similar committees on the part of the Manufacturers and Mechanics' Institute, of the Massachusetts Institute of Technology, of the American Association for the Advancement of Science, of the Museum of Fine Arts, and of the Boston Society of Natural History.

It may then happen that such a joint committee would assign the building of the Manufacturers' Institute to the display of perfected machinery and products, and our building to a systematic exhibit of the processes of industry and invention, of new materials

and problems in the arts, with such other examples as would show the progress made in the period which will elapse between the present date and the time of our next exhibition.

Would it not be well to consider what science and art have *not* yet accomplished?

Our waste of fuel is awful—the best results yet obtained in a stationary engine are, I believe, less than eleven per cent. of the absolute value of the coal—in the locomotive about three per cent.

The true pavement can only be seen in Western Kentucky, where the ferruginous gravel hardens under wear into a natural concrete and excels any artificial pavement yet invented.

The true material for covering roofs remains to be discovered or perfected.

We are saved the smoke nuisance only by the accident of our position.

We have no incombustible varnish with which to retard the action of heat upon wood so as to give us a little more time to put out a fire.

The doctors cannot tell us how to avoid obesity, and hardly know what the germ of some diseases is.

Good acoustic properties are the accident of architecture rather than the result of science, unless our Mr. Preston has solved the secret and really planned the admirable properties of this hall.

Whoever improves on Arkwright and finds a true substitute for the leather cover of the top rolls of our spinning frames will add five or ten per cent. to the capacity of every spindle in the world.

The baneful electricity developed in all our textile factories waits to be put to use.

The potato bug is too much for us, and the cotton worm not only cuts off a large part of every crop but fills the rest with the pernicious bits of leaf, when he bites off more than he can chew.

Our domestic furnaces desiccate the atmosphere of our houses and give us all the catarrh.

The best loom in use makes a dreadful clatter and will sometimes almost shake a mill to pieces, unless its vibrations are set to a different beat on a portion of the number.

Who can pretend to have solved the problem of disposing of sewage and keeping our water pure and sweet?

May we not well indict the scientists and inventors for their incapacity to meet our simplest needs; and while doing so may we not offer the only service which we practical men can render them, that is, give them the place for their feet, the tools for their hands and the shelter for their heads in our permanent building?

Gentlemen: five millions of dollars are asked merely in order that we may prepare to hold a World's Fair in Boston—let but the hundredth part of this sum be devoted to organizing the work which I have imperfectly laid out, and to extending the methods which I have sketched thus faintly, and I venture to predict that greater progress in industry and art would ensue than could be brought about by any great World's Fair in the present decade or any other; and a tenth part of

the five millions would richly endow the new work for all time to come.

We have no choice in this matter; our only advantage over our neighbors is what has been so well called "the healthy stimulus of prospective want," the sharp bite of our east wind and of our winter snows, all of which keep us from being as lazy as our neighbors may dare to be. We have in Massachusetts the most adequate railway service in proportion to our area of any State in the world — one linear mile to each four square miles of surface. It will take 120,000 miles more railroad to bring the rest of the country up to one-fourth of our standard. Here is work for mechanics — continuous, sure and steady. In the sixteen years that have elapsed since the end of the war we have constructed 66,000 miles out of the 100,000 by which this country is now served — a little more than 4,000 miles in each year. Is it too much to expect to construct an average of 6,000 miles, in each year of the next sixteen, and thus double our present service? We are building more than that this year, but we may be going too fast. What force will this require? Three hundred and fifty thousand men — more in number than all our factory operations combined. Can we spare this work?

In Atlanta I called upon our Southern brethren to thank God that the Potomac had *not* become the Rhine of this Continent, and that two jealous and hostile nations were *not* watching each other over the ramparts on their frontiers. Well and heartily did they respond. I gave them this railway problem, in which

they have most at stake, calling upon them to note the startling fact that if we had been obliged to maintain standing armies in proportion to our population as it will be for the next sixteen years — in the same measure which the standing armies of France and Germany bear to this people, our force would number 700,000 men. Such would, perhaps, have been our need had secession been successful.

With half this number we can double our railway service, and with the productive work of the remainder we can bring the commerce of the world to our feet.

Such is the picture which I would spread before your mental vision. Ours is the grand work of destroying the vested wrongs of other nations, of making the blood-tax of standing armies impossible to be borne, of carrying peace, good will and plenty to all the nations of the world. In this great work the Captains of our industry are our master mechanics, our manufacturers and our farmers. Will you aid in dedicating our buildings to the work and make them the high schools of industrial education?

THE TWENTY-FIFTH TRIENNIAL FESTIVAL.

Its interval of three years having expired, the members of the Massachusetts Charitable Mechanic Association, numerouslly accompanied by their lady friends, sat down again to table in their grand hall, on Huntington Avenue, on the evening of November 22, 1881. A successful season of competition with strong opposition, a determined wresting of success from the hands of a fate which some people thought threatened to be adverse, and the recent satisfactory close of the two months' exhibition, inspired the gathering with a peculiar complacency and sanguine trust in the future not often marked in those who sit down to great public dinners.

Admirable arrangements were made for the convenience of the guests, and many hundreds poured into the building between half-past seven and eight o'clock. "It was a fine-looking company — an excellent foundation for society to rest upon — and one could not see these men and women without feeling a stronger confidence in the future which they may shape, and in the improvements which they may invent." So said one of the daily newspapers. About eight o'clock they passed into the large hall, which was brilliantly lighted with eight gas chandeliers and nine electric lights, besides numerous gas jets upon the walls and under the galleries. Upon the platform were seated Mr. Charles W. Slack, the President of the Association, Mr. Nathaniel J. Bradlee, the Vice-President, Collector A. W. Beard, General N. P. Banks, Rev. E. A. Horton, General Francis A. Walker, Mr. M. Denman Ross, and a hundred others, both men and women. Brown's Brig-

ade Band was in the gallery opposite the platform, and entertained the company till the guests were seated at the tables. This required some fifteen or twenty minutes to accomplish, the various parties, filing out from the galleries of the exhibition hall, and, descending the stairways, entering the grand hall from the avenue end, to the music of the band. The marshalling was admirably done by Mr. Robert T. Swan, the superintendent of the late exhibition, assisted by an efficient corps of subordinates.

Although only ten days had elapsed since the closing of the exhibition, the appearance of the interior of the building had been entirely changed in this short time. The floor area had been entirely cleared; the open spaces, or "light-wells," had been solidly floored over; and the visitor could not fail upon entering to be struck, as never before, with the vast dimensions of the structure. Passing into the grand hall he found a still greater surprise awaiting him. The entire limit of the floor was filled with sixteen long rows of tables, handsomely set, extending the whole length of the hall; on the platform were tables for the invited guests and officers of the Association; and, in all, upwards of 3,000 plates were laid by Mrs. Charles A. Vinton, the caterer. During the evening there were undoubtedly more than 2,500 ladies and gentlemen present, and the scene was an unprecedented one, in this city at least. Few caterers would have cared to undertake such a task, but to say that Mrs. Vinton accomplished it satisfactorily is hardly according due praise for the tasty arrangement, bountiful supply and prompt service which characterized the spread. No attempt had been made at decorating the hall, with the exception of the platform. Upon the wall in the rear of this was a large representation of the seal of the Association surrounded by flags; festoons of green were suspended from the centre of the ceiling to the sides; and the platform was decorated with tropical and evergreen plants. Upon the front of the stage appeared the words, "Twenty-fifth Triennial Festival." The President's table was adorned with a magnificent floral design, and the other tables were also decorated with flowers.

When the company had all secured their seats at the table, President CHARLES W. SLACK spoke as follows : —

Ladies and Gentlemen : Members and Guests of the Association : We meet to-night to celebrate the twenty-fifth triennial of the Massachusetts Charitable Mechanic Association. It was in 1809 that the Association held its first festival of a like character, and it was soon made a constitutional requirement that on each third recurring year the pleasure of the social feast should be repeated. Twenty-three have been regularly celebrated in the intervening years — the requirement being religiously observed. This, as I have remarked, is the twenty-fifth occasion. Prior to these triennial gatherings, beginning in 1798, and continuing for seven years, there were similar festivals at the time of the annual meeting in December. The later constitutions have made it imperative that at the triennial festivals there should be a formal address by a member. Both at the annual and the triennial festival, it was formerly the custom for the members and their guests to meet at some convenient place in the morning of the day selected, form a procession, with the green banner of the Association at its head, with the members decorated with a green badge, and move to some church or hall, where the address, with other exercises, would occupy about two hours ; from thence they would proceed to Faneuil Hall to partake of the dinner, followed by the regulation thirteen toasts, interspersed with singing and orchestral music. At the festival of 1848 the Association turned out wine and took in women. At the next, in 1851, the customary street procession was given up — such was the changed condition of our social relations — and the literary exercises and banquet were held in the same hall. Since that period the green banner of the Association has been seldom seen save on occasions of civic demonstration in which it has taken part.

Though the manner of the celebration has changed with the passing years, the spirit of the old-time festival is still dominant. In the breadth and warmth of that cordiality I extend to you all, ladies and gentlemen, a heartfelt welcome from the Association. We are now in our eighty-seventh year —

strong, vigorous, energetic, powerful — not by reason of any undue influence, but as the result of earnest, honest effort. We thank you, while we welcome you, for the cordial support you have given all our enterprises, and especially for your coöperation during the late most successful, fourteenth, exhibition — which, in exhibits, in attendance, in pecuniary results, has led all the exhibitions of the whole forty-four years' experience of the Association in this department of its usefulness.

I have suggested that the constitution requires that a member shall present the formal triennial address. That duty will now be discharged by one who has given constant evidence in this community of a thoughtful interest in the welfare and safety of all the industrial workers, as well as their public-spirited employers ; and who, just now, has won a new claim to distinction by being the projector and most earnest promoter of the Southern Exhibition Company — our sister association in industry, skill and art — whose display is now being held, under flattering auspices, in the city of Atlanta, Georgia — and which, let us trust, may form a better than any political bond to unite all sections of the country in fraternity, unity and nationality — Mr. EDWARD ATKINSON, of this city.

[Mr. Atkinson's address will be found in the preceding pages.]

At the close of Mr. Atkinson's address, which was heartily applauded throughout, the divine blessing was invoked by Rev. EDWARD A. HORTON, of the Second church, of Boston, and the guests proceeded to partake of the substantial collation. A small army of attendants kept the tables well supplied, and an hour was agreeably spent in discussing the edibles provided.

When the inner man had been abundantly satisfied, President SLACK remarked that he would forego his intention of reading the list of medals — numbering in all some 660 — which would be found in full in the morning newspapers, which list doubtless would be more agreeable in the reading than in the hearing. The time could be more profitably em-

ployed, perhaps, in listening to some of those present who deserved well of the Association; and in this category he would place foremost the Vice-President, Mr. NATHANIEL J. BRADLEE.

Mr. BRADLEE was received with applause, and remarked : —

Ladies and Gentlemen : I do not know as I can add one word to what has already been said on this occasion. The great success of the fourteenth triennial exhibition, both financially and as an illustration of the inventive genius of our people, is a matter of congratulation to all of us, and we cannot but be proud of the support we have received from the various contributors, the board of judges, and the public who have so generously frequented these halls. We think, however, that the public are under some obligation to this Association for their energy, enterprise and public spirit, as displayed in the purchase of this estate, and in the erection thereon of this vast structure, and in providing therein a hall which is so well adapted to the various uses required by our citizens. It was a bold undertaking on our part, but I believe, with your continued support, it will result in a financial success; and when the great centennial organ, now on its way to this city from Philadelphia, which is to be presented to the Association by its members, sends forth its melodious sounds within these walls, we are confident you will feel that we are fully justified in naming it the “grand hall” of the Massachusetts Charitable Mechanic Association.

This noble hall, so vast, so grand,
Erected by a master hand,
So when the thousands gather round
To list sweet music's charming sound,
Or hearken to the speaker's clarion voice,
As he proclaims his words so choice :

Or when there gathers on this floor,
The fair and lovely, as of yore,
Tripping on the light fantastic toe
In merry dance, now fast, now slow —
Then loud will rise, with praise to all,
For those who wisely planned this hall.

When centennial organ, and the band,
 Grand and proud on this platform stand,
 With mighty chorus round about,
 Long and loud will rise the shout,
 From old and young in admiration
 For the old Association.

THE PRESIDENT. — We have present with us, this evening, ladies and gentlemen, one who has illustrated conspicuously in his own person that, under our beneficent institutions, no avenue is closed to honorable preferment by any son of the republic; that the factory operative and machinist's apprentice may become, easily, a legislator, a governor, a general, or any other servant of the public; — one, too, who is an honorary member of this Association, and who, as such, in 1866 — fifteen years ago — graced a similar occasion to this with an eloquent and practical address. I refer, of course, to our friend, Gen. NATHANIEL P. BANKS.

Gen. BANKS responded substantially as follows :—

Ladies and Gentlemen: The complimentary allusions of your President would certainly impel me to respond, had I no more substantial reasons for appearing before you on this very auspicious occasion. As we lately looked over this vast edifice, filled as it was with the tokens of industry, enterprise and skill of our own fellow citizens, we must have been impressed more than ever with the magnitude, importance and necessity of mechanical and manufacturing interests. Indeed, in this somewhat, at times, inhospitable climate, and with so large a proportion of sterile soil, it is imperative that we cultivate those arts that promote the manual dexterity, the developing quality, of mechanics and fabricators; in fact, New England is likely ever to be the home of manufactures. It is all important, therefore, these exhibitions should continue — that the favor of the public should be bestowed, without stint, as always heretofore, on your laudable efforts to promote that enterprise which, in its turn, favors the public.

The suggestions of the orator of the evening are full of significance as to the industrial future of the Southern sec-

tion of our country. While agreeing with him that there are strong hopes of a new era in that land growing out of the change in the form of labor, I maintain there is something yet needed for permanent welfare — and that is a sense of security to capitalist and laborer alike; to the former as an inducement for him to invest his means, and to the latter that he shall enjoy, when derived, the fruits of his honest toil. I regret to say that, to my mind, that security has not yet been guaranteed — the security that warrants speaking and voting without hindrance, as the honest thought of the independent citizen, regardless of color or condition, shall determine. Until this is secured I feel that any efforts to establish Northern methods of labor or manufacture will be futile. When it is established, then we may expect most encouraging results.

It is most obviously an interchangeable and mutually-favoring aim that this Association and the mass of our people have in common. The Association has done well its part. Venerable in years, it has always been active in guarding and promoting mechanical interests. Its membership has been from the solid and substantial framework of society. With an auspicious beginning, and an eminent continuance, it deserves, and I have no doubt will receive, the prolonged favor of the community. In common with other citizens of the Commonwealth, I have enjoyed and taken pride in the last grand exhibition of its enterprise — the exhibition just closed. The Association may, in my judgment, without exaggeration be said to have contributed as much, if not more, to the prosperity and happiness of the country during the three-quarters of a century of its existence, than any similar organization in the world. And I bid it, with all my heart, long years of future usefulness and honor!

THE PRESIDENT. — We are accustomed, ladies and gentlemen, to allude to this Association as a venerable body. Speaking after the manner of men, in view of human longevity, it is really so. Eighty-six years make, indeed, a long period to preserve any organization unbroken; but what shall we say when we recall that there is existing among us to-day

a church organization that was begun in 1650 — two hundred and thirty-one years ago — and that has known no break in the continuity of its ministers or services? I mean, of course, the Second Society of Boston, whose present minister has served as chaplain this evening, and who is now waiting to give us a sample of his ordinary quality in — I have no doubt — a very eloquent and pertinent speech. I present to you the Rev. EDWARD A. HORTON, minister of the Second Church.

Rev. Mr. HORTON responded as follows : —

Mr. President, Ladies and Gentlemen: The continuity referred to by Mr. Slack as so long and important will certainly be broken in its present representative if I am obliged to speak at great length in this hall. A fine audience room it is ; perfect in acoustic properties, I should judge, but immense. Only a howitzer voice can be properly heard here. You may imagine that this is a festival commemorative of something in the history of the Charitable Mechanic Association ; you have come here, no doubt, with that delusion ; you think these exercises celebrate a triennial event ; it is all a mistake. I am sorry to disillusionize you, but we are here to try this hall. Mr. Atkinson is at the other end listening, and I am shouting ; others will shout after me as others have before me. This explains all going on at this end of the hall.

There was one thing lacking in the grand exhibition which spread its attractions through this building so recently, and upon whose success I cordially congratulate those in charge ; that deficiency was an exhibit I had planned of a sleep-producer. A very important article, as I view the times. Many resort to bromides, to chloral, to this and that, in the desire to woo reluctant slumber. My exhibit would have turned this search in a more satisfactory direction. The secret is simple when revealed. I proposed to place on file certain of my sermons as samples of what can be produced, warranted to put the reader to sleep in from three to five minutes. Such remedies for sleeplessness can be made available to all ages and temperaments, and to both sexes. Pardon me for my earnestness in the matter, but I had great hopes

centered on this financial scheme, and I cannot utterly relinquish them. You will find my address in the directory, and any orders will be thankfully received.

I do not wonder at the pride Americans have in the strides of inventions, the development of material energies, so conspicuous in our land. Clustered in these halls we saw at one glance the marvels of device, the trophies of skill, which testified to our country's progress. This noble satisfaction sometimes, however, finds ludicrous expression. Two ladies from this city were in London last summer, and chanced upon a Methodist class-meeting one evening. Feeling at home,—for they had been Methodists in youth,—they remained through the exercises. At the close the pastor, desiring to be genial, went to those apparent strangers, and after a few casual remarks said: "I hope you love Jesus and are at peace with God." Immediately, without seeing the illogical relation of the reply, one of the ladies answered: "Beg pardon, but we are Americans." This comical incident enforces the truth, nevertheless, that we Yankees have uppermost in our minds, affirmations of pride and loyalty for our "right smart," "go-ahead," "clear-the-track" institutions.

But dropping the jocose strain, which after all is the true after-dinner vein, let me seriously remind you of one or two things. This Association and its exhibitions teach us the watchword of New England's future glory—skilled labor. Brains mixed with iron, wood, stone; brains more and more dominant over industry; brains ruling the whirring wheel and tapping hammer—lead on the better destiny of village and city. The upland towns deplore their deserted farms; the once thrifty annals of agriculture peak and pine; but the to-morrow of labor in these lines of manufacture and art shall replenish every wasted community. The lesson of the exhibits here has been one and the same. Not simply that we are growing into comforts and appliances rare and wonderful; not alone honor to the past inventors who wrought these things; not specially that wealth is now so abundant we can employ and enjoy these improved conditions of civilization. More than that is taught. To hold what we have

won we must push along the same path. These achievements are prophets. Skilled labor in everything, hand-work, head-work, heart-work, to the artisan, preacher, philanthropist, is the key to New England's leadership and her superiority over the teeming West and the fertile South.

Another lesson. These halls have shown us, the past weeks, wherein lies moral strength and stability for the nation, for individuals. We must rear our sons and daughters in habits of self-support. Teach them trades, equip them against emergencies. How many go down in life, victims to vice, who, if they had been taught some valuable vocation, might have defied temptation! Such wrecks are among women and men alike. See to it that amid the satisfactions of the hour, lulled by a false security, we do not deal unjustly and foolishly by the young. It is our duty to them and to the State, to educate their wills into robust action; to fit their hands to some implements of labor; to initiate them into trades. Of more value in the run of the years is this than veneer accomplishments and much school learning, which, as DeQuincey says, one brain fever burns out. I cast no stone at thorough scholarship, but let prudence be heard in planning a child's education.

My final word is this: Every great array of ingenuity and skill leaves on my mind this predominant impression: here we see man's triumph over matter and the assertion of himself as greater than his environment. Greater by virtue of learning the laws of that environment and turning them from enemies to friends. As Mr. Atkinson described Western North Carolina I recalled days I spent in that wonderful region. There, on the top of Mount Mitchell, higher than Mount Washington, graze cattle amid luscious herbage; there grow rhododendrons wild like vast hedges; there sings the Swanannoa, pearl of rivers; there nature is gracious and bountiful. But no type of manhood has yet risen there like our New England citizenship, product of howling skies and stern hills. Nature is mistress there; here, man is ruler. Every department of invention in your late fair disclosed the independence and force of character. It is the word we need

to-day. Amid all theories as to the origin and circumstance of man, the key to success, the source of progress, is faith in individual ability, a sense of individual responsibility, and a rally of individual effort. Optimist I am; but not in that degree which saps personal vigor and struggles. The world will be better as fast as each man and woman in it become more intelligent, more loyal to truth, more conscious of latent powers within.

I congratulate you, Mr. President, and all associated with you, on the happy termination of your present enterprise. May the flag of this Association float triumphantly long years to come!

THE PRESIDENT. — Of late years the Association has had a deep interest in technical education. It has done the little it was asked to do by its younger neighbor, the Massachusetts Institute of Technology, to provide workshops for the students of that preëminently useful corporation. It is with great pleasure that I announce that we have with us to-night a gentleman who was foremost in the organization and establishment of the Institute, who has been its constant and unwearied friend, and who, no less, has been our well-wisher since the years of his early manhood. I refer to M. DENMAN ROSS, Esq., whom I now present to you.

Mr. Ross responded as follows:—

Mr. President: I felt myself highly complimented on receiving your official invitation to be a guest of your Association at this eventful triennial celebration. The hearty welcome which you personally gave me as I entered the hall, followed by the genial greeting of numerous old friends whom I met as I mingled with the assembly, was most gratifying, as I felt myself recognized as a co-worker for a period of nearly a quarter of a century, in this Back Bay district of our city, in bringing about results of which the present surroundings are a successful part.

I was surprised when you invited me to take a seat on the speakers' platform and address the Association and assembled guests as a representative of the Institute of Technol-

ogy. I declined to do so for the reason that I am not at all accustomed to speak to a large assembly. But the address of Mr. Atkinson, so full of suggestion which harmonize perfectly with my own conceptions of the future uses and influence of your Association, has inspired me to act on impulse rather than judgment in rising now to respond to your renewed invitation.

The presence of General Banks calls up a host of early reminiscences in connection with Back Bay improvements, which might, I think, be interesting would time permit me to relate them. He was Governor of this State when a self-constituted body known as the Back Bay Land Reservation Committee, of which I was a member, about the year 1859, waited upon him to ask his coöperation in reserving from sale about twenty acres of land for the collocation of several educational institutions, some of which were already in existence, and others — like the Institute of Technology — then for the first time proposed. I remember that he somewhat abruptly asked: "What axe have you to grind?" To which our reply was: "The broad axe of the State of Massachusetts, and we want you and the Legislature to turn the grindstone." I am happy to bear testimony to the fact that he did finally give us his most hearty coöperation when our committee, after many persistent efforts, had succeeded in convincing him and the Legislature that we had no private axes to grind. I am glad that he is still with us to realize the great success which has been attained in the erection of the noble array of buildings for public educational institutions on a space where the water was several feet deep when he was Governor of the State. The Natural History Society and the Institute of Technology were the first to take possession, and were followed later by the Museum of Fine Arts. The past year has given us this noble exhibition building of the Massachusetts Charitable Mechanic Association, and that of the Manufacturers and Mechanics' Institute. The new Art Club building and that of the Harvard Medical School are now in process of erection, and will be soon followed by the fine Public Library building. I anticipate the time when this list shall be largely increased, so that instead of holding an old-

fashioned "world's fair," which, as Mr. Atkinson has well said, is an outgrown idea, our city will itself be so interesting a place as to attract visitors from all parts of the world.

I was much interested in the well-timed suggestions of Mr. Atkinson in which he showed what useful aid might be contributed by this Association to the progress of our city in the cultivation of the arts. But I noticed that, in enumerating the several institutions which should appoint committees to coöperate in your next triennial exhibition, he omitted one of great importance. I refer to the Arnold Arboretum, which is now so prominently before the community. This is to be a school of forestry, with a museum wherein specimens of all kinds of timber will be exhibited, and two hundred acres of land will be cultivated with every variety of tree. Let me enjoin upon you, gentlemen, that while you are interested in training your sons in the use of tools, you must, at the same time, see to it that forests are cultivated with due regard to the proper amount of the different kinds of wood necessary for use in the arts. In our ignorance of the value of our native forests we have ruthlessly destroyed them, so that in a short time our supply of various woods will be inadequate to our wants unless measures are taken to secure further cultivation.

Gentlemen, it seems like a dream that so much has been accomplished since we first moved to establish the Institute of Technology. I see around me many who have contributed each his share of labor to bring about this result. And I am happy to say that one of our most valued friends in the Legislature, at the time the matter was in its hands, was your honored President, Charles W. Slack, who, in the fourth year of our efforts to obtain the grant of land, rendered most efficient service, and by his activity and vigilance carried us over a most important crisis in our affairs.

In closing, I will say in behalf of my associates of the Institute of Technology, that I have no hesitation in pledging their hearty coöperation in carrying out the good purposes of your time-honored institution.

The PRESIDENT next introduced the orator of the evening, Mr. EDWARD ATKINSON, by saying he had already so well

pleased the company they doubtless could sustain a few more words from him. Mr. ATKINSON responded briefly with some pertinent stories, as "the nuts and wine" after the more solid course which he had served at the feast, and which were received with much merriment by the company.

At eleven o'clock, with "Auld Lang Syne" from the band, the Twenty-fifth Triennial Festival came to an end, with but one expression, and that of satisfaction, from all who participated.





rs 112 68



REFERENCE DEPARTMENT

taken from the Building

[illegible]



